# MILLER CONSTRUCTION, INC.

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## TRANSMITTAL

| TO: Kristin Higgins<br>Vermont Agency of Transportation | DATE | PROJECT NO. |
|---|---|---|
| | 7/22/2013 | Jamaica ER-BRF<br>015-1 (23) |
| | | |

XX WE ENCLOSE THE FOLLOWING: _____ UNDER SEPARATE COVER WE ARE SENDING THE FOLLOWING

| COPIES | NUMBER | DESCRIPTION | CODE |
|---|---|---|---|
| 1 | | G1 & G7 Lateral Stability due to Flange Width NCR | H |
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CODE:

A FOR INITIAL APPROVAL
B FOR FINAL APPROVAL
C APPROVED AS NOTED-RESUBMISSION REQUIRED
D APPROVED AS NOTED-RESUBMISSION NOT REQUIRED
E DISAPPROVED-RESUBMIT
F QUOTATION REQUESTED
G APPROVED
H FOR APPROVAL
I AS REQUESTED OR REQUIRED
J FOR USE IN ERECTION
K LETTER FOLLOWS
L FOR FIELD CHECK
M FOR YOUR USE

BY: Paul

# Girder G1 & G7 Constructability Computations

For

# VT Rte 30 over Ball Mountain Brook

in

# Jamaica, Vermont

CEE 053-br-13

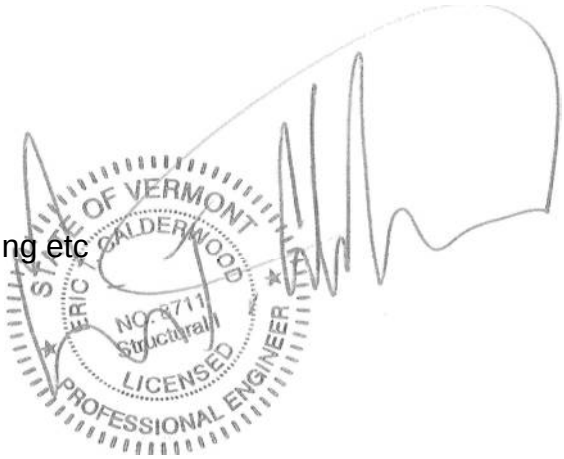
Prepared for:

Structal

By:

Calderwood Engineering etc

July 22nd, 2013




Cover Photo: Vt Rte 30 over Ball Mtn Brook
Courtesy of Miller Construction & VTrans

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Structal
Attn: John Hand
386 River Road
Claremont, New Hampshire
03743

Date: July 21st, 2013

**RE: Constructability Chk of G7 & G1 for Jamaica Vermont Rte 30 over Ball Mtn Brook**

To whom it may concern,

This Letter is being written to serve as an executive summary for this calculation package, it contains a brief explanation of the analysis and assumptions made, as well as Calderwood Engineering's recommendations for this bridge.

According to Non Conformance Reports, hereinafter NCR, Girder G1 was fabricated with flanges 1/8" narrower than design plans and shop detail plans call for. Also according to NCR, Girder G7 was fabricated with a short section of top flange approximately 5/16" too narrow. These non-conformances were apparently not recognized until the final inspection. Girders have since been erected in the field.

Calculations were provided to Calderwood Engineering by Structal showing section properties of the girders as fabricated. These calculations show the use of a top flange of 1.25" thickness & a bottom flange of 2.25" thickness for each of the girders which we feel is in error. If in fact girder G1 was fabricated with thicker flanges than the design plans indicate then the following calculations are mute, however it would be prudent at that point to revisit bottom of slab elevations prior to forming the deck because the girders will be significantly stiffer than anticipated at design. That said Calderwood Engineering anticipates those computations were performed rapidly and simply wrong flange thicknesses were chosen in reality the ratio of moment of inertia to moment of inertia should have been 31,381.08/31,548.97 for G1 which is still ~ 0.994.

Calderwood Engineering developed a RISA 3d model of the girders, for this model the properties of Girder G7 were assumed to be compromised for it's full length whereas it is in reality only compromised at the field splice location. Loads were added to represent the dead load self weight of the steel and the fluid load of the concrete deck. The unit weight for concrete used was 150 pcf. Additionally in order to conservatively represent construction loading an additional load of 50 psf was added to the deck area, and factored as a live load. Resulting flexural moments were then compared to hand calculations of the capacity of the girders. A lateral flange bending stress was added to resist the overhang forming and fluid load. The lateral flange bending stress is relatively small which is expected due to the very small overhangs, and the close diaphragm spacing. The stresses anticipated within the steel due to the deck placement are within acceptable parameters per AASHTO LRFD Bridge Design Specifications section 6.10.3 & referenced sections. Constructability was checked at both the Strength I and the Strength IV limit states. The tension flange for Girder G1 was also checked, and found to be within acceptable parameters. Because the concrete deck will act as a giant diaphragm and will become a huge component of the compression flange and because the deviation in width is in such an isolated

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location on Girder G7 not adjacent to the location of Maximum moment we do not anticipate a significan loss of capacity to the bridge at its strength limit state due to Girder G7. Because Girder G1 is the lightest loaded girder and rely's heavily on all the other girders to support it's loads, and because the flange width deviation is so small we do not anticipate a significant deviation from the load carrying capacity of the bridge due to Girder G1's flanges.

It is Calderwood Engineering's professional opinion that the girders should be left in place as is and that no further remedy is required and the bridge will perform as originally intended. That said, if VTrans has concerns regarding the load rating and the capacity of the bridge in service, perhaps it would be sensible to consider shoring either Girder G7 or also Girder G1 during the deck placement. Although it is not recommended to shore the girders, should that be the desired option then new bottom of slab elevations should be calculated, reflecting the shoring, also it should be noted on as built plans and perhaps on the load rating that the girders were shored during construction of the deck, such that future design engineers and maintenance operations will consider that.

Should you have any questions or concerns regarding our analysis or recommendations, please do not hesitate to contact us directly.

Respectfully Submitted,

Eric T. Calderwood, P.E.

## Non-Composite Section Properties Girders

G1

| Element | Width | Depth | A | y | Ay | A(y-ybar)2 | Io | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|
| Top flange | 19.875 | 1.000 | 19.875 | 0.5 | 9.9375 | 13764.77991 | 1.65625 | 13766.44 | 1472.550415 in$^4$ |
| Web | 0.500 | 48.000 | 24 | 25 | 600 | 79.20765803 | 4608 | 4687.21 | |
| Bottom Flange | 19.875 | 1.250 | 24.84375 | 49.625 | 1232.871 | 12924.20447 | 3.234863281 | 12927.44 | |
| Sum | | | 68.71875 | | 1842.809 | | | 31381.08 in$^4$ | |

$y_{bar}$ = 26.82 in $S_{ts}$ = 1.1702E+03 in$^3$

$y_{bs}$ = 24.68 in $S_{bs}$ = 1.2713E+03 in$^3$ $r_t$= 5.44 in (assumes top flange is compression flange)

## Non-Composite Section Properties Girders

G2-G4

| Element | Width | Depth | A | y | Ay | A(y-ybar)2 | Io | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|
| Top flange | 20.000 | 1.000 | 20 | 0.5 | 10 | 13851.35086 | 1.666666667 | 13853.02 | 1500.5 in$^4$ |
| Web | 0.500 | 48.000 | 24 | 25 | 600 | 79.20765803 | 4608 | 4687.21 | |
| Bottom Flange | 20.000 | 1.250 | 25 | 49.625 | 1240.625 | 13065.48877 | 3.255208333 | 13068.74 | |
| Sum | | | 69 | | 1850.625 | | | 31548.97 in$^4$ | |

$y_{bar}$ = 26.82 in $S_{ts}$ = 1.1763E+03 in$^3$

$y_{bs}$ = 24.68 in $S_{bs}$ = 1.2784E+03 in$^3$ $r_t$= 5.48 in (assumes top flange is compression flange)

## Non-Composite Section Properties Girders

G5-G6

| Element | Width | Depth | A | y | Ay | A(y-ybar)2 | Io | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|
| Top flange | 20.000 | 1.250 | 25 | 0.625 | 15.625 | 17150.09996 | 3.255208333 | 17153.36 | 2167.166667 in$^4$ |
| Web | 0.500 | 48.000 | 24 | 25.25 | 606 | 58.9075216 | 4608 | 4666.91 | |
| Bottom Flange | 20.000 | 2.000 | 40 | 50.25 | 2010 | 21964.82313 | 13.33333333 | 21978.16 | |
| Sum | | | 89 | | 2631.625 | | | 43798.42 in$^4$ | |

$y_{bar}$ = 29.57 in $S_{ts}$ = 1.4812E+03 in$^3$

$y_{bs}$ = 21.93 in $S_{bs}$ = 1.9971E+03 in$^3$ $r_t$= 5.51 in (assumes top flange is compression flange)

## Non-Composite Section Properties Girders

G7

| Element | Width | Depth | A | y | Ay | A(y-ybar)2 | Io | Ix | Iy |
|---|---|---|---|---|---|---|---|---|---|
| Top flange | 19.688 | 1.250 | 24.609375 | 0.625 | 15.38086 | 16882.12965 | 3.204345703 | 16885.33 | 2295.378006 in$^4$ |
| Web | 0.500 | 48.000 | 24 | 25.25 | 606 | 58.9075216 | 4608 | 4666.91 | |
| Bottom Flange | 20.000 | 2.250 | 45 | 50.375 | 2266.875 | 24974.75402 | 18.984375 | 24993.74 | |
| Sum | | | 93.609375 | | 2888.256 | | | 46545.98 in$^4$ | |

$y_{bar}$ = 30.85 in $S_{ts}$ = 1.5086E+03 in$^3$

$y_{bs}$ = 20.65 in $S_{bs}$ = 2.2545E+03 in$^3$ $r_t$= 5.41 in (assumes top flange is compression flange)

MODELED FOR FULL GIRDER LENGTH ALTOUGH DISCREPANCY IS @ SPLICE LOCATION ONLY

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CONCRETE DECK FLUID LOAD

= 8½" * 1/12 IN/FT * 150 PCF * 6.25 ft = 664.06 lbs/LF (INTERIOR GIRDERS)

USE 670 PLF

= 8.5 IN/12 IN/FT * 150 PCF * 6.25'/2 + 1' * 150 PCF * 1.75' = 595 lbs (EXTI.)

USE 600 PLF (EXT.)

SELF WEIGHT OF STEEL (INCL. 10% ADDL FOR WELDS & COVER PL)

GIRDER G1 =

1.10 * 68.72 IN² * 1/144 IN²/FT² * 490 PCF = 257.2 PLF

USE 260 PLF

GIRDERS G2 THRU G4 =

1.1 * 69.00 IN² * 1/144 IN²/FT² * 490 PCF = 258.27 PLF

USE 260 PLF

GIRDERS G5 - G6 =

1.1 * 89.00 IN² * 1/144 IN²/FT² * 490 PCF = 333 PLF

USE 340 PLF

GIRDER G7 =

1.1 * 93.6094 IN² * 1/144 IN²/FT² * 490 PCF = 350.39 PLF

USE 360 PLF

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WEIGHT OF DIAPHRAGMS @ EA NODE (INTERIOR)

= 1.10 * 135 PLF * 6.25 SF = 928.13 lbs

USE 1000 lbs

WEIGHT OF DIAPHRAGMS @ EA EXTERIOR NODE = 500 lbs

TOTAL NCDC LOAD (UNIFORM)

G1 = 600 PLF + 260 PLF = 860 lbs/LF

G2 = 670 PLF + 260 PLF = 930 lbs/LF

G3 = 670 PLF + 260 PLF = 930 lbs/LF

G4 = 670 PLF + 260 PLF = 930 lbs/LF

G5 = 670 PLF + 340 PLF = 1010 PLF

G6 = 670 PLF + 340 PLF = 1010 PLF

G7 = 360 PLF + 600 PLF = 960 PLF

(ADD DIAPHRAGMS AS POINT LOADS)

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MOMENT INDUCED BY OVERHANG BRACKETS ON FASCIA GIRDERS

= 1.75' * 1' * 150 PCF * 1.75 St/2 = 229.69 lbs-St/ft

USE 250 lb-St/FT

(0.25 k-FT/FT)

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USE 50 psf LIVE LOAD DURING DECK PLACEMENT

(FACTOR AS LIVE LOAD)

INTERIOR GIRDERS

$= 50^{psf} * 6.25\ ft = 312.50\ PLF$ (USE 320 PLF)

EXT. GIRDERS

$50\ psf * \left(\frac{6.25\ ft}{2} + 1.75\ ft\right) = 243.75\ PLF$

(USE 250 PLF)

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SHEET NO. 6 OF 16
CALCULATED BY ETC DATE 7/2013
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SUPPORT OH W/ LATERAL FLANGE BENDING BETWEEN DIAPHRAGMS

LATERAL LOAD CARRIED BY TOP & BTM FLANGES OF GIRDER G7 SIMULTANEOUS W/ GRAVITY LOADS

$= (12^{IN}/_{FT})\, 0.250\ K\text{-}FT/FT \;/\; (2.25_{IN} * 1/2 + 48'' + 1.25_{IN}/2)$

$= 0.0596\ K/LF$ ALONG TOP FLANGE & BTM FLANGE

(USE 0.06 K/LF) (FOR G7)

(UNFACTORED)

FOR G1 COUPLE HAS A SLIGHTLY SHORTER MOMENT ARM

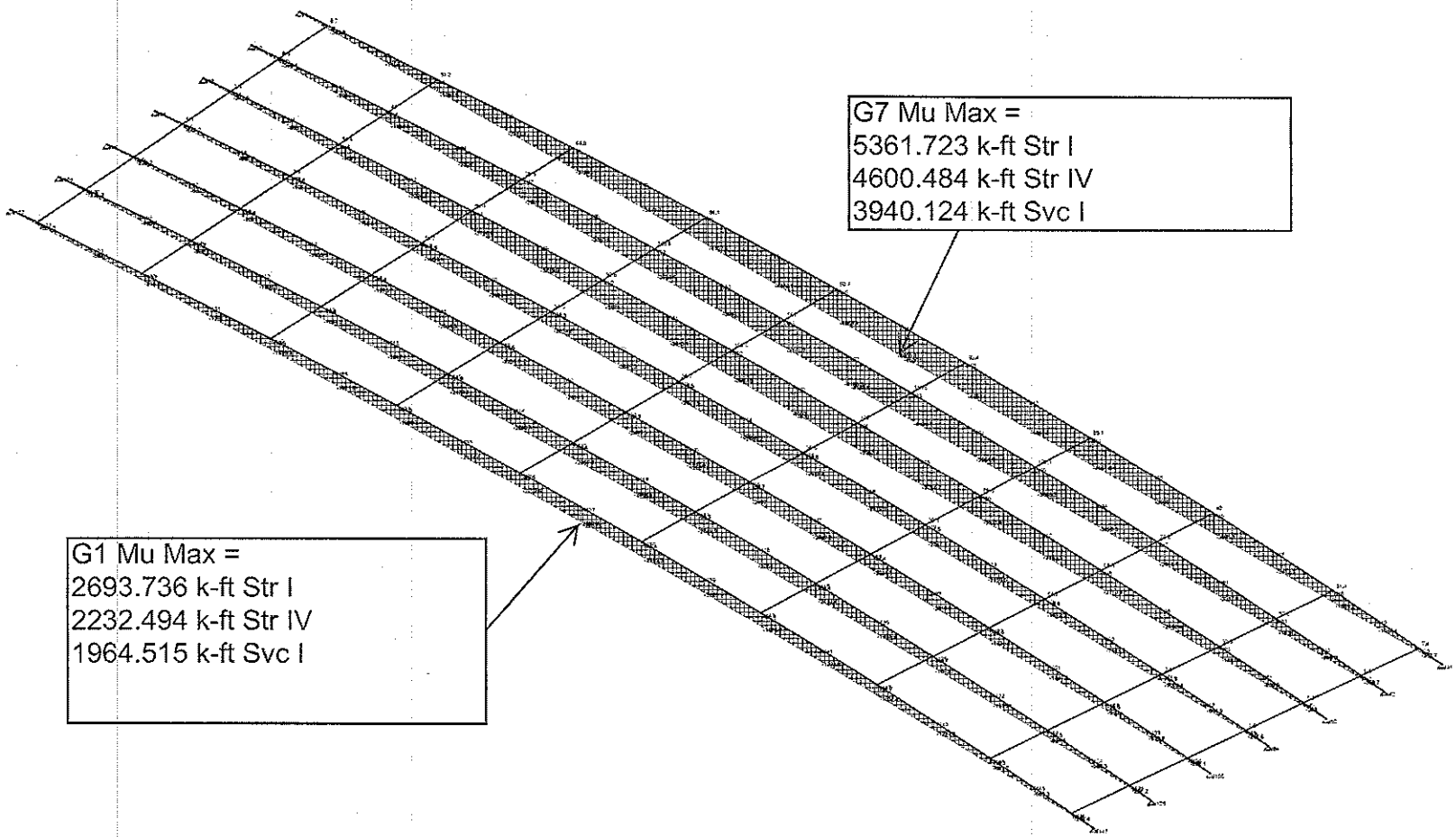
∴ LATERAL FORCE IN FLANGES @ SUPPORT O.H.

$= (12''/_{FT} * 0.25\ K\text{-}FT/FT) \;/\; (1.25'' * 1/2 + 48_{IN} + 1'' * 1/2)$

$= 0.0611\ K/LF$ ALONG TOP & BTM FLANGES

(USE 0.07 K/LF)

(UN-FACTORED)




| | | |
|---|---|---|
| Calderwood Engineering | | SK - 4 |
| Eric Calderwood | Jamaica Vermont | July 21, 2013 at 4:09 PM |
| 053-br-12 ER-BRF 015-1(23) | Str IV Moment Diagram Str I Diagram Similar | z_Bridge_Jamaica Structal.R3D |

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SHEET NO. 8 OF 16
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LATERAL FLANGE BENDING MOMENTS IN G7

W/ DIAPHRAGM SPACING = 15 Ft

$= wl^2/10$

$= [0.06\ K/LF * 15\ Ft^2]/10 = 1.35\ K\text{-}FT$

$= 16.2\ K\text{-}IN$ (MAX @ DIAPHRAGM LOCATIONS)

LATERAL FLANGE BENDING MOMENTS IN G1

$= [0.07\ K/LF * 14.22\ Ft^2]/10 = 1.42\ K\text{-}FT$

$= 17.0\ K\text{-}IN$ (MAX @ DIAPHRAGM LOCATIONS)

@ STR. I

G7 LATERAL = $1.25 * 16.2\ K\text{-}IN = 20.25\ K\text{-}IN$

G1 LATERAL = $1.25 * 17.0\ K\text{-}IN = 21.25\ K\text{-}IN$

@ STR IV

G7 LATERAL = $1.5 * 16.2 = 24.30\ K\text{-}IN$

G1 LATERAL = $1.5 * 17.0 = 25.50\ K\text{-}IN$

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✓ WEB SLENDERNESS

6.10.6.2.3

$\bar{Y}$ FROM PG. 1 FOR G7

$$\frac{2D_c}{t_w} = \frac{2(30.85\,in - 1.25\,in)}{0.5} = 118.4$$

$$\text{SLENDERNESS LIMIT} = 5.7\sqrt{\frac{29000}{50ksi}} = 137.27$$

∴ WEB IS NON-SLENDER FOR G7

✓ G1

$$\frac{2(26.82\,in - 1.0\,in)}{0.5} = 103.28 \leq 137.27$$ ∴

WEB FOR G1 IS ALSO NON-SLENDER

✓ CONSTRUCTABILITY 6.10.3.2 FLEXURE

STR I $S_l$ G7 $= 20.25\ k\text{-}in \Big/ \left[(19.6875\,in)^2 * 1.25\,in/6\right]$

$S_l = 0.251\,ksi$ (G7 STR. I)

$S_l = 0.251 * \frac{1.5}{1.25} = 0.301\,ksi$ (G7 STR IV)

$S_l = 0.251\,ksi * 1/1.25 = 0.201\,ksi$ (SVC. I)

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JOB 053-BR-13 JAMAICA
SHEET NO. 10 OF 16
CALCULATED BY ETC DATE 7/2013
CHECKED BY DATE
SCALE

V $f_1$ G1

$f_1 = 21.25 \text{ k-in} / [(19.875")^2 * 1.0"/6] = 0.323 \text{ ksi}$

$f_1 = 0.323 \text{ ksi}$ (FOR STR. I G1 $f_1$)

$f_1 = 0.323 * 1.5/1.25 = 0.387 \text{ ksi}$ (FOR STR IV G1)

$f_1 = 0.323/1.25 = 0.258 \text{ ksi}$ (FOR SVC I G1)

$f_{bu}$ G7

STR IV G7 (MEMBER M70 & M71)

$f_{bu} = \frac{4,600.484 \text{ k-ft} * 12 \text{ in/ft}}{1508.6 \text{ in}^3} = 36.59 \text{ ksi}$

STR I G7 (MEMBER M70 & M71)

$f_{bu} = \frac{5361.723 \text{ k-ft} * 12 \text{ in/ft}}{1508.6 \text{ in}^3} = 42.65 \text{ ksi}$

SVC I

$f_{bu} = \frac{3940.124 \text{ k-ft} * 12 \text{ in/ft}}{1508.6 \text{ in}^3} = 31.34 \text{ ksi}$

$f_{bu}$ G1

STR IV

$f_{bu} = \frac{2232.494 \text{ k-ft} * 12 \text{ in/ft}}{1170.2 \text{ in}^3} = 22.89 \text{ ksi}$

STR I

$f_{bu} = \frac{2693.74 \text{ k-ft} * 12 \text{ in/ft}}{1170.2 \text{ in}^3} = 27.623 \text{ ksi}$

$f_{bu} = \frac{1946.52 \text{ k-ft} * 12 \text{ in/ft}}{1170.2 \text{ in}^3} = 19.96 \text{ ksi}$

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JOB 053-BR-13
SHEET NO. 11 OF 16
CALCULATED BY ETC DATE 7/2013
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SCALE

FOR DISCRETELY BRACED FLANGES IN COMPRESSION 6.10.3.2 FLEXURE

$$f_{bu} + f_l \le \phi_f R_h F_{yc}$$

&

$$f_{bu} + f_l/3 \le \phi_f F_{nc}$$

&

$$f_{bu} \le \phi_f F_{crw}$$

ALL STEEL IS GR 50W

$R_h = 1.0$ (NON-HYBRID) (6.10.1.10)

$\phi_f = 1.0$ (6.5.4.2)

$F_{nc}$ PER 6.10.8.2

✓ LOCAL BUCKLING

$\lambda_f = \frac{19.875}{2(1.0)}$ (FOR G1) $= 9.938$

$\lambda_{pf} = 9.2$ FOR $F_{yc} = 50$ KSI $\lambda_{rf} = 0.56\sqrt{\frac{29000}{35\text{KSI}}} = 16.1196$

∴ FOR LOCAL BUCKLING

G1 $F_{nc}$ IS LIMITED TO $\left[1 - \left(1 - \frac{35}{50}\right)\left(\frac{9.938 - 9.20}{16.1196 - 9.20}\right)\right] R_b R_h F_{yc}$

$\frac{D}{t} = \frac{48.\text{IN}}{0.5} = 96 \le 150$ ∴ $R_b = 1.0$

(REF. 6.10.1.10.2 & 6.10.2.1)

G1 - $F_{nc}$ (LOCAL BUCKLING) = 48.40 KSI ($R_h = 1.0$ NON-HYBRID)

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JOB 053-BR-13
SHEET NO. 12 OF 16
CALCULATED BY ETC DATE 7/2013
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(LOCAL BUCKLING LIKELY DOES NOT GOVERN)

✓ LTB FOR G1 (G.10.8.2.3)

$$L_p = 1.0\,(r_t)\sqrt{E/F_{yc}} = 1.0\,(5.94\text{in})\sqrt{\frac{29000}{50\text{ksi}}} = 131.0\text{in}$$

$$L_r = \pi\,(r_t)\sqrt{E/F_{yr}} = 3.14159\,(5.94\text{in})\sqrt{\frac{29000}{35\text{ksi}}} = 491.94\text{in}$$

$$\therefore\ F_{nc} = C_b\left[1-\left(1-\frac{F_{yr}}{R_h F_{yc}}\right)\left(\frac{L_b - L_p}{L_r - L_p}\right)\right] R_b R_h F_{yc}$$

w/ $C_b = 1.0$ (CONSERVATIVE)

$R_h = 1.0$ $R_b = 1.0$ $L_b =$

G1 $L_b = 14'\text{-}2\,5/8'' = 170.625\text{in}$

$$G1 - F_{nc} = 1.0*\left[1-\left(1-\frac{35\text{ksi}}{1.0(50\text{ksi})}\right)\left(\frac{170.625\text{in} - 131\text{in}}{491.94\text{in} - 131\text{in}}\right)\right] 1.0(1.0)(50\text{ksi})$$

$G1 - F_{nc} = 48.35\text{ksi} \le 48.4\text{ksi}$ ∴ GOVERNS

$F_{nc} = 48.35\text{ksi}$ FOR G1

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JOB 053-BR-13
SHEET NO. 13 OF 16
CALCULATED BY ETC DATE 7/2013
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✓ $F_{nc}$ FOR GIRDER G7

✓ LOCAL BUCKLING (6.10.8.2.2)

$\lambda_f = 19.6875\,in / 2(1.25\,in) = 7.875 \leq \lambda_{pf}$

∴ $F_{nc}$ LOCAL BUCKLING = $F_{yc} = 50\,ksi$

✓ LTB (6.10.8.2.3)

$L_b = 15\,ft * 12\,in/ft = 180\,in$

$L_p = 1.0(r_t)\sqrt{E/F_{yc}} = 1.0(5.41)\sqrt{\frac{29000\,ksi}{50\,ksi}} = 130.29\,in$

$L_r = \pi(r_t)\sqrt{E/F_{yr}} = 3.14159(5.41)\sqrt{\frac{29000\,ksi}{35\,ksi}} = 489.228\,in$

$$G7 - F_{nc} = 1.0\left[1-\left(1-\frac{35\,ksi}{50\,ksi(1.0)}\right)\left(\frac{180\,in - 130.29\,in}{489.228\,in - 130.29\,in}\right)\right](1.0)(1.0)(50\,ksi)$$

$F_{nc}$ G7 = 47.23 ksi → GOVERNS FOR $F_{nc}$ G7

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JOB 053-BR-13 JAMAICA
SHEET NO. 14 OF 16
CALCULATED BY ETC DATE 7/2013
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✓ $F_{CRW}$ (6.10.1.9)

$$F_{CRW} = \frac{0.9EK}{(D/t_w)^2} \leq R_h F_{yc} \leq F_{yw}/0.7$$

w/ $k = \frac{9}{(D_c/D)^2}$

FOR GIRDER G1 $D_c = 26.82\,in - 1.0\,in = 25.82\,in$

FOR GIRDER G7 $D_c = 30.85\,in - 1.25\,in = 28.75\,in$

$k = \frac{9}{(25.82"/48")^2} = 31.104$ (FOR G1)

$k = \frac{9}{(28.75"/48")^2} = 25.09$ (FOR G7)

$$F_{CRW} \geq \frac{0.9\,(29{,}000)(25.09)}{(48/0.5)^2} \geq 71.06\,ksi \geq 1.0(50\,ksi)$$

∴ USE $F_{CRW} = 50\,ksi$ FOR BOTH G7 & G1

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JOB 053-BR-13 JAMAICA
SHEET NO. 15 OF 16
CALCULATED BY ETC DATE 7/2013
CHECKED BY DATE
SCALE

IN SUMMATION FOR COMPRESSION FLANGE

G7 $f_{bu} + f_l = 42.65\ ksi + 0.251\ ksi = 42.9\ ksi$ (STR I)

$f_{bu} + f_l = 36.59\ ksi + 0.301\ ksi = 36.89\ ksi$ (STR IV)

STR I GOVERNS:

$f_{bu} = 42.65\ ksi$ (STR I)

$f_{bu} + \frac{1}{3} f_l = 42.65\ ksi + \frac{1}{3} * 0.251\ ksi = 42.73\ ksi$

STR. I GOVERNS FOR G1 ALSO BY OBSERVATION

G1 - $f_{bu} + f_l = 27.623\ ksi + 0.323\ ksi = 27.95\ ksi$

$f_{bu} = 27.623\ ksi$

$f_{bu} + \frac{1}{3} f_l = 27.623\ ksi + \frac{0.323\ ksi}{3} = 27.730\ ksi$

$\phi_s R_h F_y = 50\ ksi$ FOR G1 & G7 > 42.9 ksi & 27.95 ksi

∴ OK

$\phi_s F_{nc} = 1.0 (47.23\ ksi)$ FOR G7 $= 47.23\ ksi$ FOR G7

$\geq 42.73\ ksi$ ∴ OK

$\phi_s F_{nc} = 1.0 (48.35\ ksi)$ FOR G1 $= 48.35\ ksi$ FOR G1

$\geq 27.730\ ksi$ ∴ OK

$\phi_s F_{CRW} = 50\ ksi$ $f_{bu} \leq F_{CRW} \phi_s$ FOR G1 & G7 BY INSPECTION

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JOB 053-BR-13
SHEET NO. 16 OF 16
CALCULATED BY ETC DATE 7/2013
CHECKED BY DATE
SCALE

THE DECK CAN BE FULLY CONSTRUCTED W/ OUT ANY ADVERSE IMPACT TO THE COMPRESSION FLANGE

FOR G7 TENSION FLANGE IS UNAFFECTED

FOR G1 TENSION FLANGE IS LIGHTLY LOADED (AS G1 IS LIGHTLY LOADED DUE TO IT'S POSITION @ THE INSIDE OF THE CURVE)

✓ 6.10.3.2.2 DISCRETELY BRACED TENSION FLANGES FOR G1

$$f_{bu} + f_l \le \phi_f R_h F_{yt} = 1.0\,(1.0)\,50\ ksi$$

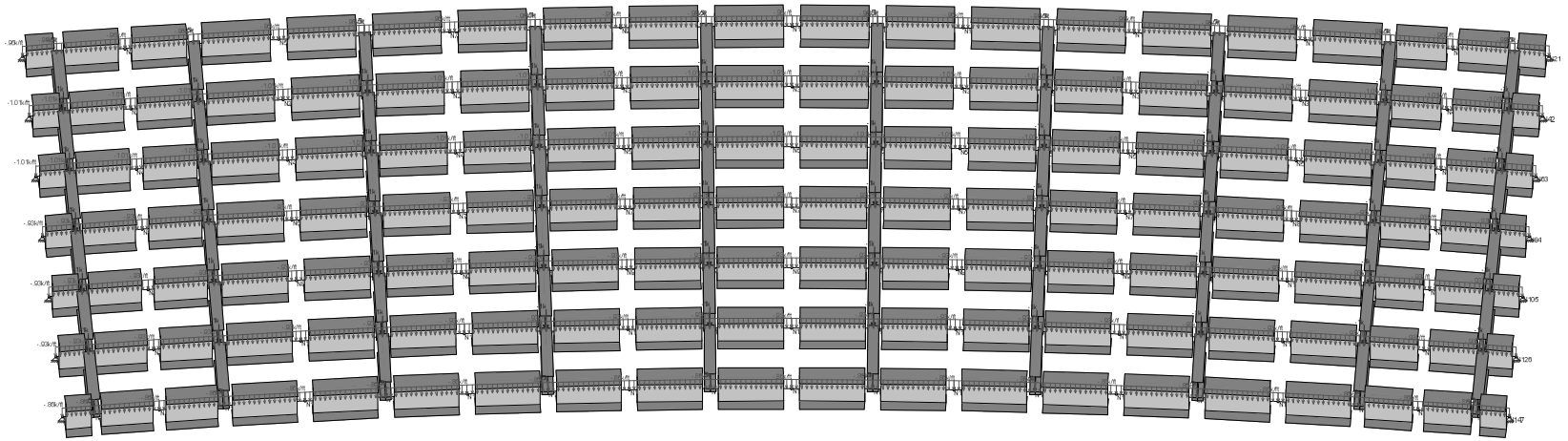
$$f_{bu} = \frac{2693.736\ k\text{-}ft * 12\ in/ft}{1271.3\ in^3} = 25.43\ ksi$$

$$f_l = \frac{21.25\ k\text{-}in}{\left(19.875^2 * 1.25/6\right)} = 0.258\ ksi$$

$$f_{bu} + f_l = 25.43\ ksi + 0.258\ ksi =$$

$$25.685\ ksi << 50\ ksi$$

∴ G1 TENSION FLANGE OK.



Loads: BLC 1, NCDC
Results for LC 3, Service I

| | | |
|---|---|---|
| Calderwood Engineering | | SK - 2 |
| Eric Calderwood | Jamaica Vermont | July 21, 2013 at 2:19 PM |
| 053-br-12 ER-BRF 015-1(23) | Loading Diagram - Nodes & members shown Isometric | z_Bridge_Jamaica Structal.R3D |

JT. DEFL.

SVC. I W/O

50 PSF LIVE LOAD

## Joint Deflections (By Combination)

NCDC DEFLECTION (STEEL + SLAB GIRDER G7)

| | LC | Joint Label | X [in] | Y [in] | Z [in] | X Rotation [rad] | Y Rotation [rad] | Z Rotation [rad] |
|---|---|---|---|---|---|---|---|---|
| 1 | 5 | N1 | 0 | 0 | 0 | -1.839e-3 | 0 | -1.577e-2 |
| 2 | 5 | N2 | 0 | -.582 | 0 | -1.835e-3 | 0 | -1.573e-2 |
| 3 | 5 | N3 | 0 | -1.733 | 0 | -5.29e-3 | 0 | -1.51e-2 |
| 4 | 5 | N4 | 0 | -2.845 | 0 | -3.19e-3 | 0 | -1.462e-2 |
| 5 | 5 | N5 | 0 | -4.148 | 0 | -1.372e-2 | 0 | -1.273e-2 |
| 6 | 5 | N6 | 0 | -5.313 | 0 | -4.622e-3 | 0 | -1.167e-2 |
| 7 | 5 | N7 | 0 | -6.313 | 0 | -1.949e-2 | 0 | -9.096e-3 |
| 8 | 5 | N8 | 0 | -7.112 | 0 | -5.65e-3 | 0 | -7.441e-3 |
| 9 | 5 | N9 | 0 | -7.698 | 0 | -2.303e-2 | 0 | -4.66e-3 |
| 10 | 5 | N10 | 0 | -8.044 | 0 | -6.18e-3 | 0 | -2.441e-3 |
| 11 | 5 | N11 | 0 | -8.153 | 0 | -2.417e-2 | 0 | 1.718e-4 |
| 12 | 5 | N12 | 0 | -8.009 | 0 | -6.16e-3 | 0 | 2.806e-3 |
| 13 | 5 | N13 | 0 | -7.63 | 0 | -2.286e-2 | 0 | 4.99e-3 |
| 14 | 5 | N14 | 0 | -7.012 | 0 | -5.592e-3 | 0 | 7.769e-3 |
| 15 | 5 | N15 | 0 | -6.185 | 0 | -1.916e-2 | 0 | 9.382e-3 |
| 16 | 5 | N16 | 0 | -5.158 | 0 | -4.533e-3 | 0 | 1.193e-2 |
| 17 | 5 | N17 | 0 | -3.973 | 0 | -1.324e-2 | 0 | 1.294e-2 |
| 18 | 5 | N18 | 0 | -2.653 | 0 | -3.075e-3 | 0 | 1.477e-2 |
| 19 | 5 | N19 | 0 | -1.633 | 0 | -4.64e-3 | 0 | 1.52e-2 |
| 20 | 5 | N20 | 0 | -.582 | 0 | -1.833e-3 | 0 | 1.573e-2 |
| 21 | 5 | N21 | 0 | 0 | 0 | -1.837e-3 | 0 | 1.577e-2 |
| 22 | 5 | N22 | 0 | 0 | 0 | -1.762e-3 | 0 | -1.505e-2 |
| 23 | 5 | N23 | 0 | -.55 | 0 | -1.758e-3 | 0 | -1.5e-2 |
| 24 | 5 | N24 | 0 | -1.638 | 0 | -5.768e-3 | 0 | -1.435e-2 |
| 25 | 5 | N25 | 0 | -2.689 | 0 | -3.082e-3 | 0 | -1.394e-2 |
| 26 | 5 | N26 | 0 | -3.92 | 0 | -1.553e-2 | 0 | -1.197e-2 |
| 27 | 5 | N27 | 0 | -5.018 | 0 | -4.482e-3 | 0 | -1.111e-2 |
| 28 | 5 | N28 | 0 | -5.962 | 0 | -2.208e-2 | 0 | -8.509e-3 |
| 29 | 5 | N29 | 0 | -6.714 | 0 | -5.491e-3 | 0 | -7.074e-3 |
| 30 | 5 | N30 | 0 | -7.267 | 0 | -2.607e-2 | 0 | -4.346e-3 |
| 31 | 5 | N31 | 0 | -7.591 | 0 | -6.014e-3 | 0 | -2.319e-3 |
| 32 | 5 | N32 | 0 | -7.695 | 0 | -2.736e-2 | 0 | 1.6e-4 |
| 33 | 5 | N33 | 0 | -7.559 | 0 | -5.995e-3 | 0 | 2.666e-3 |
| 34 | 5 | N34 | 0 | -7.203 | 0 | -2.588e-2 | 0 | 4.654e-3 |
| 35 | 5 | N35 | 0 | -6.62 | 0 | -5.435e-3 | 0 | 7.386e-3 |
| 36 | 5 | N36 | 0 | -5.841 | 0 | -2.17e-2 | 0 | 8.78e-3 |
| 37 | 5 | N37 | 0 | -4.872 | 0 | -4.394e-3 | 0 | 1.135e-2 |
| 38 | 5 | N38 | 0 | -3.754 | 0 | -1.498e-2 | 0 | 1.218e-2 |
| 39 | 5 | N39 | 0 | -2.508 | 0 | -2.971e-3 | 0 | 1.408e-2 |
| 40 | 5 | N40 | 0 | -1.544 | 0 | -5.001e-3 | 0 | 1.445e-2 |
| 41 | 5 | N41 | 0 | -.55 | 0 | -1.757e-3 | 0 | 1.5e-2 |
| 42 | 5 | N42 | 0 | 0 | 0 | -1.761e-3 | 0 | 1.504e-2 |
| 43 | 5 | N43 | 0 | 0 | 0 | -1.685e-3 | 0 | -1.432e-2 |
| 44 | 5 | N44 | 0 | -.52 | 0 | -1.682e-3 | 0 | -1.428e-2 |
| 45 | 5 | N45 | 0 | -1.546 | 0 | -5.541e-3 | 0 | -1.365e-2 |
| 46 | 5 | N46 | 0 | -2.537 | 0 | -2.971e-3 | 0 | -1.326e-2 |
| 47 | 5 | N47 | 0 | -3.698 | 0 | -1.489e-2 | 0 | -1.137e-2 |
| 48 | 5 | N48 | 0 | -4.733 | 0 | -4.333e-3 | 0 | -1.055e-2 |
| 49 | 5 | N49 | 0 | -5.622 | 0 | -2.11e-2 | 0 | -8.072e-3 |
| 50 | 5 | N50 | 0 | -6.329 | 0 | -5.32e-3 | 0 | -6.708e-3 |
| 51 | 5 | N51 | 0 | -6.849 | 0 | -2.485e-2 | 0 | -4.119e-3 |
| 52 | 5 | N52 | 0 | -7.154 | 0 | -5.831e-3 | 0 | -2.197e-3 |
| 53 | 5 | N53 | 0 | -7.252 | 0 | -2.606e-2 | 0 | 1.515e-4 |
| 54 | 5 | N54 | 0 | -7.123 | 0 | -5.812e-3 | 0 | 2.526e-3 |
| 55 | 5 | N55 | 0 | -6.789 | 0 | -2.467e-2 | 0 | 4.411e-3 |
| 56 | 5 | N56 | 0 | -6.24 | 0 | -5.265e-3 | 0 | 7.004e-3 |

## Joint Deflections (By Combination) (Continued)

| | LC | Joint Label | X [in] | Y [in] | Z [in] | X Rotation [rad] | Y Rotation [rad] | Z Rotation [rad] |
|---|---|---|---|---|---|---|---|---|
| 57 | 5 | N57 | 0 | -5.508 | 0 | -2.074e-2 | 0 | 8.329e-3 |
| 58 | 5 | N58 | 0 | -4.596 | 0 | -4.248e-3 | 0 | 1.078e-2 |
| 59 | 5 | N59 | 0 | -3.542 | 0 | -1.437e-2 | 0 | 1.157e-2 |
| 60 | 5 | N60 | 0 | -2.367 | 0 | -2.863e-3 | 0 | 1.339e-2 |
| 61 | 5 | N61 | 0 | -1.457 | 0 | -4.805e-3 | 0 | 1.375e-2 |
| 62 | 5 | N62 | 0 | -.519 | 0 | -1.681e-3 | 0 | 1.428e-2 |
| 63 | 5 | N63 | 0 | 0 | 0 | -1.685e-3 | 0 | 1.432e-2 |
| 64 | 5 | N64 | 0 | 0 | 0 | -1.622e-3 | 0 | -1.368e-2 |
| 65 | 5 | N65 | 0 | -.49 | 0 | -1.619e-3 | 0 | -1.365e-2 |
| 66 | 5 | N66 | 0 | -1.458 | 0 | -8.959e-3 | 0 | -1.274e-2 |
| 67 | 5 | N67 | 0 | -2.39 | 0 | -2.896e-3 | 0 | -1.266e-2 |
| 68 | 5 | N68 | 0 | -3.486 | 0 | -2.668e-2 | 0 | -1.007e-2 |
| 69 | 5 | N69 | 0 | -4.456 | 0 | -4.241e-3 | 0 | -1.005e-2 |
| 70 | 5 | N70 | 0 | -5.296 | 0 | -3.786e-2 | 0 | -6.952e-3 |
| 71 | 5 | N71 | 0 | -5.955 | 0 | -5.212e-3 | 0 | -6.376e-3 |
| 72 | 5 | N72 | 0 | -6.448 | 0 | -4.454e-2 | 0 | -3.494e-3 |
| 73 | 5 | N73 | 0 | -6.728 | 0 | -5.715e-3 | 0 | -2.087e-3 |
| 74 | 5 | N74 | 0 | -6.826 | 0 | -4.667e-2 | 0 | 1.277e-4 |
| 75 | 5 | N75 | 0 | -6.7 | 0 | -5.696e-3 | 0 | 2.398e-3 |
| 76 | 5 | N76 | 0 | -6.391 | 0 | -4.422e-2 | 0 | 3.744e-3 |
| 77 | 5 | N77 | 0 | -5.872 | 0 | -5.158e-3 | 0 | 6.658e-3 |
| 78 | 5 | N78 | 0 | -5.188 | 0 | -3.723e-2 | 0 | 7.184e-3 |
| 79 | 5 | N79 | 0 | -4.327 | 0 | -4.157e-3 | 0 | 1.027e-2 |
| 80 | 5 | N80 | 0 | -3.34 | 0 | -2.573e-2 | 0 | 1.027e-2 |
| 81 | 5 | N81 | 0 | -2.23 | 0 | -2.791e-3 | 0 | 1.279e-2 |
| 82 | 5 | N82 | 0 | -1.373 | 0 | -7.486e-3 | 0 | 1.289e-2 |
| 83 | 5 | N83 | 0 | -.489 | 0 | -1.618e-3 | 0 | 1.364e-2 |
| 84 | 5 | N84 | 0 | 0 | 0 | -1.622e-3 | 0 | 1.368e-2 |
| 85 | 5 | N85 | 0 | 0 | 0 | -1.563e-3 | 0 | -1.295e-2 |
| 86 | 5 | N86 | 0 | -.46 | 0 | -1.56e-3 | 0 | -1.292e-2 |
| 87 | 5 | N87 | 0 | -1.368 | 0 | -8.602e-3 | 0 | -1.205e-2 |
| 88 | 5 | N88 | 0 | -2.243 | 0 | -2.872e-3 | 0 | -1.197e-2 |
| 89 | 5 | N89 | 0 | -3.271 | 0 | -2.55e-2 | 0 | -9.507e-3 |
| 90 | 5 | N90 | 0 | -4.179 | 0 | -4.246e-3 | 0 | -9.48e-3 |
| 91 | 5 | N91 | 0 | -4.965 | 0 | -3.607e-2 | 0 | -6.553e-3 |
| 92 | 5 | N92 | 0 | -5.582 | 0 | -5.229e-3 | 0 | -6.008e-3 |
| 93 | 5 | N93 | 0 | -6.043 | 0 | -4.232e-2 | 0 | -3.291e-3 |
| 94 | 5 | N94 | 0 | -6.305 | 0 | -5.735e-3 | 0 | -1.965e-3 |
| 95 | 5 | N95 | 0 | -6.396 | 0 | -4.43e-2 | 0 | 1.202e-4 |
| 96 | 5 | N96 | 0 | -6.279 | 0 | -5.716e-3 | 0 | 2.258e-3 |
| 97 | 5 | N97 | 0 | -5.99 | 0 | -4.202e-2 | 0 | 3.526e-3 |
| 98 | 5 | N98 | 0 | -5.504 | 0 | -5.174e-3 | 0 | 6.275e-3 |
| 99 | 5 | N99 | 0 | -4.865 | 0 | -3.547e-2 | 0 | 6.772e-3 |
| 100 | 5 | N100 | 0 | -4.058 | 0 | -4.161e-3 | 0 | 9.692e-3 |
| 101 | 5 | N101 | 0 | -3.133 | 0 | -2.46e-2 | 0 | 9.699e-3 |
| 102 | 5 | N102 | 0 | -2.093 | 0 | -2.764e-3 | 0 | 1.209e-2 |
| 103 | 5 | N103 | 0 | -1.289 | 0 | -7.193e-3 | 0 | 1.22e-2 |
| 104 | 5 | N104 | 0 | -.459 | 0 | -1.559e-3 | 0 | 1.291e-2 |
| 105 | 5 | N105 | 0 | 0 | 0 | -1.562e-3 | 0 | 1.295e-2 |
| 106 | 5 | N106 | 0 | 0 | 0 | -1.506e-3 | 0 | -1.218e-2 |
| 107 | 5 | N107 | 0 | -.429 | 0 | -1.503e-3 | 0 | -1.215e-2 |
| 108 | 5 | N108 | 0 | -1.276 | 0 | -8.212e-3 | 0 | -1.132e-2 |
| 109 | 5 | N109 | 0 | -2.092 | 0 | -2.87e-3 | 0 | -1.125e-2 |
| 110 | 5 | N110 | 0 | -3.05 | 0 | -2.424e-2 | 0 | -8.924e-3 |
| 111 | 5 | N111 | 0 | -3.897 | 0 | -4.295e-3 | 0 | -8.896e-3 |
| 112 | 5 | N112 | 0 | -4.629 | 0 | -3.423e-2 | 0 | -6.143e-3 |
| 113 | 5 | N113 | 0 | -5.203 | 0 | -5.307e-3 | 0 | -5.632e-3 |

## Joint Deflections (By Combination) (Continued)

| | LC | Joint Label | X [in] | Y [in] | Z [in] | X Rotation [rad] | Y Rotation [rad] | Z Rotation [rad] |
|---|---|---|---|---|---|---|---|---|
| 114 | 5 | N114 | 0 | -5.633 | 0 | -4.01e-2 | 0 | -3.083e-3 |
| 115 | 5 | N115 | 0 | -5.877 | 0 | -5.826e-3 | 0 | -1.841e-3 |
| 116 | 5 | N116 | 0 | -5.961 | 0 | -4.196e-2 | 0 | 1.125e-4 |
| 117 | 5 | N117 | 0 | -5.852 | 0 | -5.807e-3 | 0 | 2.116e-3 |
| 118 | 5 | N118 | 0 | -5.583 | 0 | -3.982e-2 | 0 | 3.303e-3 |
| 119 | 5 | N119 | 0 | -5.131 | 0 | -5.251e-3 | 0 | 5.882e-3 |
| 120 | 5 | N120 | 0 | -4.536 | 0 | -3.367e-2 | 0 | 6.349e-3 |
| 121 | 5 | N121 | 0 | -3.784 | 0 | -4.207e-3 | 0 | 9.096e-3 |
| 122 | 5 | N122 | 0 | -2.922 | 0 | -2.339e-2 | 0 | 9.105e-3 |
| 123 | 5 | N123 | 0 | -1.952 | 0 | -2.756e-3 | 0 | 1.137e-2 |
| 124 | 5 | N124 | 0 | -1.202 | 0 | -6.877e-3 | 0 | 1.147e-2 |
| 125 | 5 | N125 | 0 | -.429 | 0 | -1.502e-3 | 0 | 1.215e-2 |
| 126 | 5 | N126 | 0 | 0 | 0 | -1.505e-3 | 0 | 1.218e-2 |
| 127 | 5 | N127 | 0 | 0 | 0 | -1.443e-3 | 0 | -1.138e-2 |
| 128 | 5 | N128 | 0 | -.397 | 0 | -1.44e-3 | 0 | -1.135e-2 |
| 129 | 5 | N129 | 0 | -1.182 | 0 | -7.772e-3 | 0 | -1.057e-2 |
| 130 | 5 | N130 | 0 | -1.937 | 0 | -2.853e-3 | 0 | -1.049e-2 |
| 131 | 5 | N131 | 0 | -2.824 | 0 | -2.288e-2 | 0 | -8.321e-3 |
| 132 | 5 | N132 | 0 | -3.607 | 0 | -4.329e-3 | 0 | -8.293e-3 |
| 133 | 5 | N133 | 0 | -4.285 | 0 | -3.229e-2 | 0 | -5.722e-3 |
| 134 | 5 | N134 | 0 | -4.816 | 0 | -5.374e-3 | 0 | -5.245e-3 |
| 135 | 5 | N135 | 0 | -5.214 | 0 | -3.781e-2 | 0 | -2.87e-3 |
| 136 | 5 | N136 | 0 | -5.439 | 0 | -5.909e-3 | 0 | -1.713e-3 |
| 137 | 5 | N137 | 0 | -5.518 | 0 | -3.955e-2 | 0 | 1.046e-4 |
| 138 | 5 | N138 | 0 | -5.416 | 0 | -5.889e-3 | 0 | 1.969e-3 |
| 139 | 5 | N139 | 0 | -5.168 | 0 | -3.755e-2 | 0 | 3.075e-3 |
| 140 | 5 | N140 | 0 | -4.75 | 0 | -5.316e-3 | 0 | 5.478e-3 |
| 141 | 5 | N141 | 0 | -4.199 | 0 | -3.177e-2 | 0 | 5.914e-3 |
| 142 | 5 | N142 | 0 | -3.504 | 0 | -4.238e-3 | 0 | 8.479e-3 |
| 143 | 5 | N143 | 0 | -2.705 | 0 | -2.207e-2 | 0 | 8.491e-3 |
| 144 | 5 | N144 | 0 | -1.807 | 0 | -2.736e-3 | 0 | 1.061e-2 |
| 145 | 5 | N145 | 0 | -1.113 | 0 | -6.523e-3 | 0 | 1.07e-2 |
| 146 | 5 | N146 | 0 | -.397 | 0 | -1.439e-3 | 0 | 1.135e-2 |
| 147 | 5 | N147 | 0 | 0 | 0 | -1.442e-3 | 0 | 1.138e-2 |

TOTAL NCDC (SLAB + STEEL DEFL)
GIRDER G1

STR I

## Joint Boundary Conditions

| | Joint Label | X [k/in] | Y [k/in] | Z [k/in] | X Rot.[k-ft/rad] | Y Rot.[k-ft/rad] | Z Rot.[k-ft/rad] | Footing |
|---|---|---|---|---|---|---|---|---|
| 1 | N1 | Reaction | Reaction | Reaction | | | | |
| 2 | N22 | Reaction | Reaction | Reaction | | | | |
| 3 | N43 | Reaction | Reaction | Reaction | | | | |
| 4 | N64 | Reaction | Reaction | Reaction | | | | |
| 5 | N85 | Reaction | Reaction | Reaction | | | | |
| 6 | N106 | Reaction | Reaction | Reaction | | | | |
| 7 | N127 | Reaction | Reaction | Reaction | | | | |
| 8 | N21 | Reaction | Reaction | Reaction | | | | |
| 9 | N42 | Reaction | Reaction | Reaction | | | | |
| 10 | N63 | Reaction | Reaction | Reaction | | | | |
| 11 | N84 | Reaction | Reaction | Reaction | | | | |
| 12 | N105 | Reaction | Reaction | Reaction | | | | |
| 13 | N126 | Reaction | Reaction | Reaction | | | | |
| 14 | N147 | Reaction | Reaction | Reaction | | | | |

## Member Section Forces (By Combination)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | M1 | 1 | 0 | 1.401 | 0 | -5.459 | 0 | 9.398 |
| 2 | | | 2 | 0 | 1.401 | 0 | -5.459 | 0 | 7.21 |
| 3 | | | 3 | 0 | 1.401 | 0 | -5.459 | 0 | 5.021 |
| 4 | | | 4 | 0 | 1.401 | 0 | -5.459 | 0 | 2.833 |
| 5 | | | 5 | 0 | 1.401 | 0 | -5.459 | 0 | .644 |
| 6 | 1 | M2 | 1 | 0 | 1.503 | 0 | -5.477 | 0 | 9.187 |
| 7 | | | 2 | 0 | 1.503 | 0 | -5.477 | 0 | 6.839 |
| 8 | | | 3 | 0 | 1.503 | 0 | -5.477 | 0 | 4.491 |
| 9 | | | 4 | 0 | 1.503 | 0 | -5.477 | 0 | 2.143 |
| 10 | | | 5 | 0 | 1.503 | 0 | -5.477 | 0 | -.206 |
| 11 | 1 | M3 | 1 | 0 | 2.095 | 0 | -4.743 | 0 | 8.139 |
| 12 | | | 2 | 0 | 2.095 | 0 | -4.743 | 0 | 4.866 |
| 13 | | | 3 | 0 | 2.095 | 0 | -4.743 | 0 | 1.592 |
| 14 | | | 4 | 0 | 2.095 | 0 | -4.743 | 0 | -1.682 |
| 15 | | | 5 | 0 | 2.095 | 0 | -4.743 | 0 | -4.956 |
| 16 | 1 | M4 | 1 | 0 | 1.445 | 0 | -5.597 | 0 | .48 |
| 17 | | | 2 | 0 | 1.445 | 0 | -5.597 | 0 | -1.778 |
| 18 | | | 3 | 0 | 1.445 | 0 | -5.597 | 0 | -4.036 |
| 19 | | | 4 | 0 | 1.445 | 0 | -5.597 | 0 | -6.294 |
| 20 | | | 5 | 0 | 1.445 | 0 | -5.597 | 0 | -8.552 |
| 21 | 1 | M5 | 1 | 0 | .91 | 0 | -5.926 | 0 | -3.271 |
| 22 | | | 2 | 0 | .91 | 0 | -5.926 | 0 | -4.692 |
| 23 | | | 3 | 0 | .91 | 0 | -5.926 | 0 | -6.114 |
| 24 | | | 4 | 0 | .91 | 0 | -5.926 | 0 | -7.536 |
| 25 | | | 5 | 0 | .91 | 0 | -5.926 | 0 | -8.958 |
| 26 | 1 | M6 | 1 | 0 | .15 | 0 | -6.255 | 0 | -3.875 |
| 27 | | | 2 | 0 | .15 | 0 | -6.255 | 0 | -4.11 |
| 28 | | | 3 | 0 | .15 | 0 | -6.255 | 0 | -4.345 |
| 29 | | | 4 | 0 | .15 | 0 | -6.255 | 0 | -4.58 |
| 30 | | | 5 | 0 | .15 | 0 | -6.255 | 0 | -4.815 |
| 31 | 1 | M7 | 1 | 0 | 5.097 | 0 | -5.195 | 0 | 39.792 |
| 32 | | | 2 | 0 | 5.097 | 0 | -5.195 | 0 | 31.828 |
| 33 | | | 3 | 0 | 5.097 | 0 | -5.195 | 0 | 23.863 |
| 34 | | | 4 | 0 | 5.097 | 0 | -5.195 | 0 | 15.899 |
| 35 | | | 5 | 0 | 5.097 | 0 | -5.195 | 0 | 7.935 |
| 36 | 1 | M8 | 1 | 0 | 6.816 | 0 | -5.203 | 0 | 44.8 |
| 37 | | | 2 | 0 | 6.816 | 0 | -5.203 | 0 | 34.149 |
| 38 | | | 3 | 0 | 6.816 | 0 | -5.203 | 0 | 23.498 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 39 | | | 4 | 0 | 6.816 | 0 | -5.203 | 0 | 12.848 |
| 40 | | | 5 | 0 | 6.816 | 0 | -5.203 | 0 | 2.197 |
| 41 | 1 | M9 | 1 | 0 | 9.548 | 0 | -4.479 | 0 | 38.055 |
| 42 | | | 2 | 0 | 9.548 | 0 | -4.479 | 0 | 23.137 |
| 43 | | | 3 | 0 | 9.548 | 0 | -4.479 | 0 | 8.219 |
| 44 | | | 4 | 0 | 9.548 | 0 | -4.479 | 0 | -6.7 |
| 45 | | | 5 | 0 | 9.548 | 0 | -4.479 | 0 | -21.618 |
| 46 | 1 | M10 | 1 | 0 | 6.615 | 0 | -5.284 | 0 | 2.857 |
| 47 | | | 2 | 0 | 6.615 | 0 | -5.284 | 0 | -7.478 |
| 48 | | | 3 | 0 | 6.615 | 0 | -5.284 | 0 | -17.814 |
| 49 | | | 4 | 0 | 6.615 | 0 | -5.284 | 0 | -28.149 |
| 50 | | | 5 | 0 | 6.615 | 0 | -5.284 | 0 | -38.485 |
| 51 | 1 | M11 | 1 | 0 | 3.876 | 0 | -5.555 | 0 | -14.879 |
| 52 | | | 2 | 0 | 3.876 | 0 | -5.555 | 0 | -20.935 |
| 53 | | | 3 | 0 | 3.876 | 0 | -5.555 | 0 | -26.991 |
| 54 | | | 4 | 0 | 3.876 | 0 | -5.555 | 0 | -33.046 |
| 55 | | | 5 | 0 | 3.876 | 0 | -5.555 | 0 | -39.102 |
| 56 | 1 | M12 | 1 | 0 | .748 | 0 | -5.829 | 0 | -16.556 |
| 57 | | | 2 | 0 | .748 | 0 | -5.829 | 0 | -17.725 |
| 58 | | | 3 | 0 | .748 | 0 | -5.829 | 0 | -18.894 |
| 59 | | | 4 | 0 | .748 | 0 | -5.829 | 0 | -20.063 |
| 60 | | | 5 | 0 | .748 | 0 | -5.829 | 0 | -21.232 |
| 61 | 1 | M13 | 1 | 0 | 9.273 | 0 | -4.324 | 0 | 75.435 |
| 62 | | | 2 | 0 | 9.273 | 0 | -4.324 | 0 | 60.946 |
| 63 | | | 3 | 0 | 9.273 | 0 | -4.324 | 0 | 46.457 |
| 64 | | | 4 | 0 | 9.273 | 0 | -4.324 | 0 | 31.968 |
| 65 | | | 5 | 0 | 9.273 | 0 | -4.324 | 0 | 17.478 |
| 66 | 1 | M14 | 1 | 0 | 13.001 | 0 | -4.309 | 0 | 86.88 |
| 67 | | | 2 | 0 | 13.001 | 0 | -4.309 | 0 | 66.565 |
| 68 | | | 3 | 0 | 13.001 | 0 | -4.309 | 0 | 46.251 |
| 69 | | | 4 | 0 | 13.001 | 0 | -4.309 | 0 | 25.936 |
| 70 | | | 5 | 0 | 13.001 | 0 | -4.309 | 0 | 5.621 |
| 71 | 1 | M15 | 1 | 0 | 16.876 | 0 | -3.814 | 0 | 72.768 |
| 72 | | | 2 | 0 | 16.876 | 0 | -3.814 | 0 | 46.399 |
| 73 | | | 3 | 0 | 16.876 | 0 | -3.814 | 0 | 20.031 |
| 74 | | | 4 | 0 | 16.876 | 0 | -3.814 | 0 | -6.338 |
| 75 | | | 5 | 0 | 16.876 | 0 | -3.814 | 0 | -32.706 |
| 76 | 1 | M16 | 1 | 0 | 12.173 | 0 | -4.315 | 0 | 12.586 |
| 77 | | | 2 | 0 | 12.173 | 0 | -4.315 | 0 | -6.435 |
| 78 | | | 3 | 0 | 12.173 | 0 | -4.315 | 0 | -25.455 |
| 79 | | | 4 | 0 | 12.173 | 0 | -4.315 | 0 | -44.475 |
| 80 | | | 5 | 0 | 12.173 | 0 | -4.315 | 0 | -63.496 |
| 81 | 1 | M17 | 1 | 0 | 7.418 | 0 | -4.47 | 0 | -19.974 |
| 82 | | | 2 | 0 | 7.418 | 0 | -4.47 | 0 | -31.564 |
| 83 | | | 3 | 0 | 7.418 | 0 | -4.47 | 0 | -43.154 |
| 84 | | | 4 | 0 | 7.418 | 0 | -4.47 | 0 | -54.744 |
| 85 | | | 5 | 0 | 7.418 | 0 | -4.47 | 0 | -66.334 |
| 86 | 1 | M18 | 1 | 0 | 2.287 | 0 | -4.644 | 0 | -24.82 |
| 87 | | | 2 | 0 | 2.287 | 0 | -4.644 | 0 | -28.394 |
| 88 | | | 3 | 0 | 2.287 | 0 | -4.644 | 0 | -31.968 |
| 89 | | | 4 | 0 | 2.287 | 0 | -4.644 | 0 | -35.542 |
| 90 | | | 5 | 0 | 2.287 | 0 | -4.644 | 0 | -39.117 |
| 91 | 1 | M19 | 1 | 0 | 11.598 | 0 | -2.843 | 0 | 98.04 |
| 92 | | | 2 | 0 | 11.598 | 0 | -2.843 | 0 | 79.918 |
| 93 | | | 3 | 0 | 11.598 | 0 | -2.843 | 0 | 61.795 |
| 94 | | | 4 | 0 | 11.598 | 0 | -2.843 | 0 | 43.673 |
| 95 | | | 5 | 0 | 11.598 | 0 | -2.843 | 0 | 25.55 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 96 | 1 | M20 | 1 | 0 | 16.774 | 0 | -2.836 | 0 | 115.357 |
| 97 | | | 2 | 0 | 16.774 | 0 | -2.836 | 0 | 89.148 |
| 98 | | | 3 | 0 | 16.774 | 0 | -2.836 | 0 | 62.939 |
| 99 | | | 4 | 0 | 16.774 | 0 | -2.836 | 0 | 36.73 |
| 100 | | | 5 | 0 | 16.774 | 0 | -2.836 | 0 | 10.521 |
| 101 | 1 | M21 | 1 | 0 | 20.845 | 0 | -2.535 | 0 | 97.002 |
| 102 | | | 2 | 0 | 20.845 | 0 | -2.535 | 0 | 64.431 |
| 103 | | | 3 | 0 | 20.845 | 0 | -2.535 | 0 | 31.861 |
| 104 | | | 4 | 0 | 20.845 | 0 | -2.535 | 0 | -.71 |
| 105 | | | 5 | 0 | 20.845 | 0 | -2.535 | 0 | -33.281 |
| 106 | 1 | M22 | 1 | 0 | 15.745 | 0 | -2.808 | 0 | 24.681 |
| 107 | | | 2 | 0 | 15.745 | 0 | -2.808 | 0 | .079 |
| 108 | | | 3 | 0 | 15.745 | 0 | -2.808 | 0 | -24.522 |
| 109 | | | 4 | 0 | 15.745 | 0 | -2.808 | 0 | -49.124 |
| 110 | | | 5 | 0 | 15.745 | 0 | -2.808 | 0 | -73.726 |
| 111 | 1 | M23 | 1 | 0 | 9.947 | 0 | -2.873 | 0 | -18.228 |
| 112 | | | 2 | 0 | 9.947 | 0 | -2.873 | 0 | -33.77 |
| 113 | | | 3 | 0 | 9.947 | 0 | -2.873 | 0 | -49.313 |
| 114 | | | 4 | 0 | 9.947 | 0 | -2.873 | 0 | -64.855 |
| 115 | | | 5 | 0 | 9.947 | 0 | -2.873 | 0 | -80.397 |
| 116 | 1 | M24 | 1 | 0 | 3.56 | 0 | -2.962 | 0 | -27.541 |
| 117 | | | 2 | 0 | 3.56 | 0 | -2.962 | 0 | -33.104 |
| 118 | | | 3 | 0 | 3.56 | 0 | -2.962 | 0 | -38.667 |
| 119 | | | 4 | 0 | 3.56 | 0 | -2.962 | 0 | -44.23 |
| 120 | | | 5 | 0 | 3.56 | 0 | -2.962 | 0 | -49.793 |
| 121 | 1 | M25 | 1 | 0 | 12.727 | 0 | -.947 | 0 | 109.304 |
| 122 | | | 2 | 0 | 12.727 | 0 | -.947 | 0 | 89.418 |
| 123 | | | 3 | 0 | 12.727 | 0 | -.947 | 0 | 69.533 |
| 124 | | | 4 | 0 | 12.727 | 0 | -.947 | 0 | 49.647 |
| 125 | | | 5 | 0 | 12.727 | 0 | -.947 | 0 | 29.761 |
| 126 | 1 | M26 | 1 | 0 | 18.502 | 0 | -.945 | 0 | 129.679 |
| 127 | | | 2 | 0 | 18.502 | 0 | -.945 | 0 | 100.769 |
| 128 | | | 3 | 0 | 18.502 | 0 | -.945 | 0 | 71.859 |
| 129 | | | 4 | 0 | 18.502 | 0 | -.945 | 0 | 42.949 |
| 130 | | | 5 | 0 | 18.502 | 0 | -.945 | 0 | 14.039 |
| 131 | 1 | M27 | 1 | 0 | 22.693 | 0 | -.848 | 0 | 110.028 |
| 132 | | | 2 | 0 | 22.693 | 0 | -.848 | 0 | 74.57 |
| 133 | | | 3 | 0 | 22.693 | 0 | -.848 | 0 | 39.111 |
| 134 | | | 4 | 0 | 22.693 | 0 | -.848 | 0 | 3.653 |
| 135 | | | 5 | 0 | 22.693 | 0 | -.848 | 0 | -31.805 |
| 136 | 1 | M28 | 1 | 0 | 17.464 | 0 | -.931 | 0 | 32.356 |
| 137 | | | 2 | 0 | 17.464 | 0 | -.931 | 0 | 5.068 |
| 138 | | | 3 | 0 | 17.464 | 0 | -.931 | 0 | -22.22 |
| 139 | | | 4 | 0 | 17.464 | 0 | -.931 | 0 | -49.509 |
| 140 | | | 5 | 0 | 17.464 | 0 | -.931 | 0 | -76.797 |
| 141 | 1 | M29 | 1 | 0 | 11.304 | 0 | -.947 | 0 | -15.476 |
| 142 | | | 2 | 0 | 11.304 | 0 | -.947 | 0 | -33.139 |
| 143 | | | 3 | 0 | 11.304 | 0 | -.947 | 0 | -50.801 |
| 144 | | | 4 | 0 | 11.304 | 0 | -.947 | 0 | -68.464 |
| 145 | | | 5 | 0 | 11.304 | 0 | -.947 | 0 | -86.126 |
| 146 | 1 | M30 | 1 | 0 | 4.343 | 0 | -.973 | 0 | -27.786 |
| 147 | | | 2 | 0 | 4.343 | 0 | -.973 | 0 | -34.572 |
| 148 | | | 3 | 0 | 4.343 | 0 | -.973 | 0 | -41.358 |
| 149 | | | 4 | 0 | 4.343 | 0 | -.973 | 0 | -48.145 |
| 150 | | | 5 | 0 | 4.343 | 0 | -.973 | 0 | -54.931 |
| 151 | 1 | M31 | 1 | 0 | 12.686 | 0 | 1.089 | 0 | 108.893 |
| 152 | | | 2 | 0 | 12.686 | 0 | 1.089 | 0 | 89.071 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 153 | | | 3 | 0 | 12.686 | 0 | 1.089 | 0 | 69.248 |
| 154 | | | 4 | 0 | 12.686 | 0 | 1.089 | 0 | 49.426 |
| 155 | | | 5 | 0 | 12.686 | 0 | 1.089 | 0 | 29.604 |
| 156 | 1 | M32 | 1 | 0 | 18.442 | 0 | 1.087 | 0 | 129.153 |
| 157 | | | 2 | 0 | 18.442 | 0 | 1.087 | 0 | 100.338 |
| 158 | | | 3 | 0 | 18.442 | 0 | 1.087 | 0 | 71.523 |
| 159 | | | 4 | 0 | 18.442 | 0 | 1.087 | 0 | 42.707 |
| 160 | | | 5 | 0 | 18.442 | 0 | 1.087 | 0 | 13.892 |
| 161 | 1 | M33 | 1 | 0 | 22.627 | 0 | .975 | 0 | 109.535 |
| 162 | | | 2 | 0 | 22.627 | 0 | .975 | 0 | 74.18 |
| 163 | | | 3 | 0 | 22.627 | 0 | .975 | 0 | 38.824 |
| 164 | | | 4 | 0 | 22.627 | 0 | .975 | 0 | 3.469 |
| 165 | | | 5 | 0 | 22.627 | 0 | .975 | 0 | -31.886 |
| 166 | 1 | M34 | 1 | 0 | 17.403 | 0 | 1.071 | 0 | 32.051 |
| 167 | | | 2 | 0 | 17.403 | 0 | 1.071 | 0 | 4.858 |
| 168 | | | 3 | 0 | 17.403 | 0 | 1.071 | 0 | -22.334 |
| 169 | | | 4 | 0 | 17.403 | 0 | 1.071 | 0 | -49.526 |
| 170 | | | 5 | 0 | 17.403 | 0 | 1.071 | 0 | -76.718 |
| 171 | 1 | M35 | 1 | 0 | 11.254 | 0 | 1.089 | 0 | -15.608 |
| 172 | | | 2 | 0 | 11.254 | 0 | 1.089 | 0 | -33.191 |
| 173 | | | 3 | 0 | 11.254 | 0 | 1.089 | 0 | -50.775 |
| 174 | | | 4 | 0 | 11.254 | 0 | 1.089 | 0 | -68.359 |
| 175 | | | 5 | 0 | 11.254 | 0 | 1.089 | 0 | -85.942 |
| 176 | 1 | M36 | 1 | 0 | 4.312 | 0 | 1.119 | 0 | -27.799 |
| 177 | | | 2 | 0 | 4.312 | 0 | 1.119 | 0 | -34.536 |
| 178 | | | 3 | 0 | 4.312 | 0 | 1.119 | 0 | -41.273 |
| 179 | | | 4 | 0 | 4.312 | 0 | 1.119 | 0 | -48.01 |
| 180 | | | 5 | 0 | 4.312 | 0 | 1.119 | 0 | -54.748 |
| 181 | 1 | M37 | 1 | 0 | 11.476 | 0 | 2.964 | 0 | 96.819 |
| 182 | | | 2 | 0 | 11.476 | 0 | 2.964 | 0 | 78.887 |
| 183 | | | 3 | 0 | 11.476 | 0 | 2.964 | 0 | 60.956 |
| 184 | | | 4 | 0 | 11.476 | 0 | 2.964 | 0 | 43.024 |
| 185 | | | 5 | 0 | 11.476 | 0 | 2.964 | 0 | 25.092 |
| 186 | 1 | M38 | 1 | 0 | 16.583 | 0 | 2.956 | 0 | 113.801 |
| 187 | | | 2 | 0 | 16.583 | 0 | 2.956 | 0 | 87.89 |
| 188 | | | 3 | 0 | 16.583 | 0 | 2.956 | 0 | 61.979 |
| 189 | | | 4 | 0 | 16.583 | 0 | 2.956 | 0 | 36.068 |
| 190 | | | 5 | 0 | 16.583 | 0 | 2.956 | 0 | 10.158 |
| 191 | 1 | M39 | 1 | 0 | 20.64 | 0 | 2.641 | 0 | 95.604 |
| 192 | | | 2 | 0 | 20.64 | 0 | 2.641 | 0 | 63.355 |
| 193 | | | 3 | 0 | 20.64 | 0 | 2.641 | 0 | 31.105 |
| 194 | | | 4 | 0 | 20.64 | 0 | 2.641 | 0 | -1.144 |
| 195 | | | 5 | 0 | 20.64 | 0 | 2.641 | 0 | -33.394 |
| 196 | 1 | M40 | 1 | 0 | 15.556 | 0 | 2.929 | 0 | 23.893 |
| 197 | | | 2 | 0 | 15.556 | 0 | 2.929 | 0 | -.413 |
| 198 | | | 3 | 0 | 15.556 | 0 | 2.929 | 0 | -24.72 |
| 199 | | | 4 | 0 | 15.556 | 0 | 2.929 | 0 | -49.027 |
| 200 | | | 5 | 0 | 15.556 | 0 | 2.929 | 0 | -73.333 |
| 201 | 1 | M41 | 1 | 0 | 9.804 | 0 | 2.999 | 0 | -18.468 |
| 202 | | | 2 | 0 | 9.804 | 0 | 2.999 | 0 | -33.786 |
| 203 | | | 3 | 0 | 9.804 | 0 | 2.999 | 0 | -49.104 |
| 204 | | | 4 | 0 | 9.804 | 0 | 2.999 | 0 | -64.423 |
| 205 | | | 5 | 0 | 9.804 | 0 | 2.999 | 0 | -79.741 |
| 206 | 1 | M42 | 1 | 0 | 3.48 | 0 | 3.093 | 0 | -27.481 |
| 207 | | | 2 | 0 | 3.48 | 0 | 3.093 | 0 | -32.919 |
| 208 | | | 3 | 0 | 3.48 | 0 | 3.093 | 0 | -38.357 |
| 209 | | | 4 | 0 | 3.48 | 0 | 3.093 | 0 | -43.795 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 210 | | | 5 | 0 | 3.48 | 0 | 3.093 | 0 | -49.233 |
| 211 | 1 | M43 | 1 | 0 | 9.078 | 0 | 4.408 | 0 | 73.439 |
| 212 | | | 2 | 0 | 9.078 | 0 | 4.408 | 0 | 59.255 |
| 213 | | | 3 | 0 | 9.078 | 0 | 4.408 | 0 | 45.071 |
| 214 | | | 4 | 0 | 9.078 | 0 | 4.408 | 0 | 30.887 |
| 215 | | | 5 | 0 | 9.078 | 0 | 4.408 | 0 | 16.704 |
| 216 | 1 | M44 | 1 | 0 | 12.654 | 0 | 4.392 | 0 | 84.297 |
| 217 | | | 2 | 0 | 12.654 | 0 | 4.392 | 0 | 64.525 |
| 218 | | | 3 | 0 | 12.654 | 0 | 4.392 | 0 | 44.753 |
| 219 | | | 4 | 0 | 12.654 | 0 | 4.392 | 0 | 24.981 |
| 220 | | | 5 | 0 | 12.654 | 0 | 4.392 | 0 | 5.21 |
| 221 | 1 | M45 | 1 | 0 | 16.497 | 0 | 3.882 | 0 | 70.636 |
| 222 | | | 2 | 0 | 16.497 | 0 | 3.882 | 0 | 44.86 |
| 223 | | | 3 | 0 | 16.497 | 0 | 3.882 | 0 | 19.084 |
| 224 | | | 4 | 0 | 16.497 | 0 | 3.882 | 0 | -6.692 |
| 225 | | | 5 | 0 | 16.497 | 0 | 3.882 | 0 | -32.468 |
| 226 | 1 | M46 | 1 | 0 | 11.839 | 0 | 4.401 | 0 | 11.694 |
| 227 | | | 2 | 0 | 11.839 | 0 | 4.401 | 0 | -6.805 |
| 228 | | | 3 | 0 | 11.839 | 0 | 4.401 | 0 | -25.304 |
| 229 | | | 4 | 0 | 11.839 | 0 | 4.401 | 0 | -43.803 |
| 230 | | | 5 | 0 | 11.839 | 0 | 4.401 | 0 | -62.302 |
| 231 | 1 | M47 | 1 | 0 | 7.205 | 0 | 4.565 | 0 | -19.852 |
| 232 | | | 2 | 0 | 7.205 | 0 | 4.565 | 0 | -31.11 |
| 233 | | | 3 | 0 | 7.205 | 0 | 4.565 | 0 | -42.368 |
| 234 | | | 4 | 0 | 7.205 | 0 | 4.565 | 0 | -53.626 |
| 235 | | | 5 | 0 | 7.205 | 0 | 4.565 | 0 | -64.884 |
| 236 | 1 | M48 | 1 | 0 | 2.204 | 0 | 4.747 | 0 | -24.386 |
| 237 | | | 2 | 0 | 2.204 | 0 | 4.747 | 0 | -27.829 |
| 238 | | | 3 | 0 | 2.204 | 0 | 4.747 | 0 | -31.272 |
| 239 | | | 4 | 0 | 2.204 | 0 | 4.747 | 0 | -34.715 |
| 240 | | | 5 | 0 | 2.204 | 0 | 4.747 | 0 | -38.159 |
| 241 | 1 | M49 | 1 | 0 | 4.697 | 0 | 5.23 | 0 | 36.536 |
| 242 | | | 2 | 0 | 4.697 | 0 | 5.23 | 0 | 29.197 |
| 243 | | | 3 | 0 | 4.697 | 0 | 5.23 | 0 | 21.859 |
| 244 | | | 4 | 0 | 4.697 | 0 | 5.23 | 0 | 14.521 |
| 245 | | | 5 | 0 | 4.697 | 0 | 5.23 | 0 | 7.182 |
| 246 | 1 | M50 | 1 | 0 | 6.252 | 0 | 5.241 | 0 | 41.058 |
| 247 | | | 2 | 0 | 6.252 | 0 | 5.241 | 0 | 31.29 |
| 248 | | | 3 | 0 | 6.252 | 0 | 5.241 | 0 | 21.522 |
| 249 | | | 4 | 0 | 6.252 | 0 | 5.241 | 0 | 11.754 |
| 250 | | | 5 | 0 | 6.252 | 0 | 5.241 | 0 | 1.985 |
| 251 | 1 | M51 | 1 | 0 | 8.823 | 0 | 4.5 | 0 | 34.947 |
| 252 | | | 2 | 0 | 8.823 | 0 | 4.5 | 0 | 21.161 |
| 253 | | | 3 | 0 | 8.823 | 0 | 4.5 | 0 | 7.375 |
| 254 | | | 4 | 0 | 8.823 | 0 | 4.5 | 0 | -6.411 |
| 255 | | | 5 | 0 | 8.823 | 0 | 4.5 | 0 | -20.197 |
| 256 | 1 | M52 | 1 | 0 | 6.1 | 0 | 5.328 | 0 | 2.326 |
| 257 | | | 2 | 0 | 6.1 | 0 | 5.328 | 0 | -7.206 |
| 258 | | | 3 | 0 | 6.1 | 0 | 5.328 | 0 | -16.738 |
| 259 | | | 4 | 0 | 6.1 | 0 | 5.328 | 0 | -26.27 |
| 260 | | | 5 | 0 | 6.1 | 0 | 5.328 | 0 | -35.802 |
| 261 | 1 | M53 | 1 | 0 | 3.557 | 0 | 5.607 | 0 | -14.078 |
| 262 | | | 2 | 0 | 3.557 | 0 | 5.607 | 0 | -19.636 |
| 263 | | | 3 | 0 | 3.557 | 0 | 5.607 | 0 | -25.194 |
| 264 | | | 4 | 0 | 3.557 | 0 | 5.607 | 0 | -30.751 |
| 265 | | | 5 | 0 | 3.557 | 0 | 5.607 | 0 | -36.309 |
| 266 | 1 | M54 | 1 | 0 | .638 | 0 | 5.888 | 0 | -15.558 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 267 | | | 2 | 0 | .638 | 0 | 5.888 | 0 | -16.555 |
| 268 | | | 3 | 0 | .638 | 0 | 5.888 | 0 | -17.553 |
| 269 | | | 4 | 0 | .638 | 0 | 5.888 | 0 | -18.551 |
| 270 | | | 5 | 0 | .638 | 0 | 5.888 | 0 | -19.548 |
| 271 | 1 | M55 | 1 | 0 | 1.214 | 0 | 5.457 | 0 | 8.498 |
| 272 | | | 2 | 0 | 1.214 | 0 | 5.457 | 0 | 6.601 |
| 273 | | | 3 | 0 | 1.214 | 0 | 5.457 | 0 | 4.704 |
| 274 | | | 4 | 0 | 1.214 | 0 | 5.457 | 0 | 2.807 |
| 275 | | | 5 | 0 | 1.214 | 0 | 5.457 | 0 | .909 |
| 276 | 1 | M56 | 1 | 0 | 1.4 | 0 | 5.476 | 0 | 8.619 |
| 277 | | | 2 | 0 | 1.4 | 0 | 5.476 | 0 | 6.431 |
| 278 | | | 3 | 0 | 1.4 | 0 | 5.476 | 0 | 4.243 |
| 279 | | | 4 | 0 | 1.4 | 0 | 5.476 | 0 | 2.055 |
| 280 | | | 5 | 0 | 1.4 | 0 | 5.476 | 0 | -.133 |
| 281 | 1 | M57 | 1 | 0 | 1.888 | 0 | 4.759 | 0 | 7.398 |
| 282 | | | 2 | 0 | 1.888 | 0 | 4.759 | 0 | 4.448 |
| 283 | | | 3 | 0 | 1.888 | 0 | 4.759 | 0 | 1.499 |
| 284 | | | 4 | 0 | 1.888 | 0 | 4.759 | 0 | -1.45 |
| 285 | | | 5 | 0 | 1.888 | 0 | 4.759 | 0 | -4.399 |
| 286 | 1 | M58 | 1 | 0 | 1.379 | 0 | 5.597 | 0 | .477 |
| 287 | | | 2 | 0 | 1.379 | 0 | 5.597 | 0 | -1.679 |
| 288 | | | 3 | 0 | 1.379 | 0 | 5.597 | 0 | -3.834 |
| 289 | | | 4 | 0 | 1.379 | 0 | 5.597 | 0 | -5.989 |
| 290 | | | 5 | 0 | 1.379 | 0 | 5.597 | 0 | -8.144 |
| 291 | 1 | M59 | 1 | 0 | .821 | 0 | 5.924 | 0 | -3.407 |
| 292 | | | 2 | 0 | .821 | 0 | 5.924 | 0 | -4.69 |
| 293 | | | 3 | 0 | .821 | 0 | 5.924 | 0 | -5.973 |
| 294 | | | 4 | 0 | .821 | 0 | 5.924 | 0 | -7.255 |
| 295 | | | 5 | 0 | .821 | 0 | 5.924 | 0 | -8.538 |
| 296 | 1 | M60 | 1 | 0 | .056 | 0 | 6.248 | 0 | -3.976 |
| 297 | | | 2 | 0 | .056 | 0 | 6.248 | 0 | -4.064 |
| 298 | | | 3 | 0 | .056 | 0 | 6.248 | 0 | -4.152 |
| 299 | | | 4 | 0 | .056 | 0 | 6.248 | 0 | -4.24 |
| 300 | | | 5 | 0 | .056 | 0 | 6.248 | 0 | -4.328 |
| 301 | 1 | M61 | 1 | 0 | 152.416 | 0 | 0 | 0 | 0 |
| 302 | | | 2 | 0 | 151.188 | 0 | 0 | 0 | -113.852 |
| 303 | | | 3 | 0 | 149.96 | 0 | 0 | 0 | -226.783 |
| 304 | | | 4 | 0 | 148.732 | 0 | 0 | 0 | -338.792 |
| 305 | | | 5 | 0 | 147.504 | 0 | 0 | 0 | -449.881 |
| 306 | 1 | M62 | 1 | 0 | 145.478 | 0 | 6.614 | 0 | -444.452 |
| 307 | | | 2 | 0 | 143.022 | 0 | 6.614 | 0 | -660.826 |
| 308 | | | 3 | 0 | 140.566 | 0 | 6.614 | 0 | -873.516 |
| 309 | | | 4 | 0 | 138.11 | 0 | 6.614 | 0 | -1082.522 |
| 310 | | | 5 | 0 | 135.653 | 0 | 6.614 | 0 | -1287.843 |
| 311 | 1 | M63 | 1 | 0 | 135.653 | 0 | -4.1 | 0 | -1287.854 |
| 312 | | | 2 | 0 | 133.197 | 0 | -4.1 | 0 | -1489.491 |
| 313 | | | 3 | 0 | 130.741 | 0 | -4.1 | 0 | -1687.444 |
| 314 | | | 4 | 0 | 128.285 | 0 | -4.1 | 0 | -1881.713 |
| 315 | | | 5 | 0 | 125.828 | 0 | -4.1 | 0 | -2072.297 |
| 316 | 1 | M64 | 1 | 0 | 120.106 | 0 | 16.325 | 0 | -2067.18 |
| 317 | | | 2 | 0 | 117.036 | 0 | 16.325 | 0 | -2289.5 |
| 318 | | | 3 | 0 | 113.966 | 0 | 16.325 | 0 | -2506.063 |
| 319 | | | 4 | 0 | 110.895 | 0 | 16.325 | 0 | -2716.869 |
| 320 | | | 5 | 0 | 107.825 | 0 | 16.325 | 0 | -2921.918 |
| 321 | 1 | M65 | 1 | 0 | 107.825 | 0 | -14.059 | 0 | -2921.93 |
| 322 | | | 2 | 0 | 104.755 | 0 | -14.059 | 0 | -3121.222 |
| 323 | | | 3 | 0 | 101.684 | 0 | -14.059 | 0 | -3314.758 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 324 | | | 4 | 0 | 98.614 | 0 | -14.059 | 0 | -3502.536 |
| 325 | | | 5 | 0 | 95.544 | 0 | -14.059 | 0 | -3684.558 |
| 326 | 1 | M66 | 1 | 0 | 85.646 | 0 | 23.084 | 0 | -3680.281 |
| 327 | | | 2 | 0 | 82.575 | 0 | 23.084 | 0 | -3837.988 |
| 328 | | | 3 | 0 | 79.505 | 0 | 23.084 | 0 | -3989.938 |
| 329 | | | 4 | 0 | 76.435 | 0 | 23.084 | 0 | -4136.131 |
| 330 | | | 5 | 0 | 73.365 | 0 | 23.084 | 0 | -4276.568 |
| 331 | 1 | M67 | 1 | 0 | 73.365 | 0 | -21.386 | 0 | -4276.577 |
| 332 | | | 2 | 0 | 70.294 | 0 | -21.386 | 0 | -4411.256 |
| 333 | | | 3 | 0 | 67.224 | 0 | -21.386 | 0 | -4540.179 |
| 334 | | | 4 | 0 | 64.154 | 0 | -21.386 | 0 | -4663.344 |
| 335 | | | 5 | 0 | 61.083 | 0 | -21.386 | 0 | -4780.753 |
| 336 | 1 | M68 | 1 | 0 | 48.86 | 0 | 26.957 | 0 | -4777.939 |
| 337 | | | 2 | 0 | 45.79 | 0 | 26.957 | 0 | -4866.673 |
| 338 | | | 3 | 0 | 42.719 | 0 | 26.957 | 0 | -4949.65 |
| 339 | | | 4 | 0 | 39.649 | 0 | 26.957 | 0 | -5026.87 |
| 340 | | | 5 | 0 | 36.579 | 0 | 26.957 | 0 | -5098.333 |
| 341 | 1 | M69 | 1 | 0 | 36.579 | 0 | -26.06 | 0 | -5098.338 |
| 342 | | | 2 | 0 | 33.508 | 0 | -26.06 | 0 | -5164.044 |
| 343 | | | 3 | 0 | 30.438 | 0 | -26.06 | 0 | -5223.994 |
| 344 | | | 4 | 0 | 27.368 | 0 | -26.06 | 0 | -5278.187 |
| 345 | | | 5 | 0 | 24.298 | 0 | -26.06 | 0 | -5326.623 |
| 346 | 1 | M70 | 1 | 0 | 10.946 | 0 | 27.861 | 0 | -5325.685 |
| 347 | | | 2 | 0 | 7.875 | 0 | 27.861 | 0 | -5343.329 |
| 348 | | | 3 | 0 | 4.805 | 0 | 27.861 | 0 | -5355.217 |
| 349 | | | 4 | 0 | 1.735 | 0 | 27.861 | 0 | -5361.348 |
| 350 | | | 5 | 0 | -1.336 | 0 | 27.861 | 0 | -5361.723 |
| 351 | 1 | M71 | 1 | 0 | -1.336 | 0 | -27.894 | 0 | -5361.722 |
| 352 | | | 2 | 0 | -4.406 | 0 | -27.894 | 0 | -5356.34 |
| 353 | | | 3 | 0 | -7.476 | 0 | -27.894 | 0 | -5345.201 |
| 354 | | | 4 | 0 | -10.546 | 0 | -27.894 | 0 | -5328.305 |
| 355 | | | 5 | 0 | -13.617 | 0 | -27.894 | 0 | -5305.652 |
| 356 | 1 | M72 | 1 | 0 | -26.928 | 0 | 25.823 | 0 | -5306.731 |
| 357 | | | 2 | 0 | -29.998 | 0 | 25.823 | 0 | -5253.362 |
| 358 | | | 3 | 0 | -33.069 | 0 | 25.823 | 0 | -5194.238 |
| 359 | | | 4 | 0 | -36.139 | 0 | 25.823 | 0 | -5129.356 |
| 360 | | | 5 | 0 | -39.209 | 0 | 25.823 | 0 | -5058.717 |
| 361 | 1 | M73 | 1 | 0 | -39.209 | 0 | -26.782 | 0 | -5058.712 |
| 362 | | | 2 | 0 | -42.279 | 0 | -26.782 | 0 | -4982.317 |
| 363 | | | 3 | 0 | -45.35 | 0 | -26.782 | 0 | -4900.165 |
| 364 | | | 4 | 0 | -48.42 | 0 | -26.782 | 0 | -4812.257 |
| 365 | | | 5 | 0 | -51.49 | 0 | -26.782 | 0 | -4718.591 |
| 366 | 1 | M74 | 1 | 0 | -63.592 | 0 | 20.956 | 0 | -4721.525 |
| 367 | | | 2 | 0 | -66.662 | 0 | 20.956 | 0 | -4599.413 |
| 368 | | | 3 | 0 | -69.732 | 0 | 20.956 | 0 | -4471.544 |
| 369 | | | 4 | 0 | -72.802 | 0 | 20.956 | 0 | -4337.918 |
| 370 | | | 5 | 0 | -75.873 | 0 | 20.956 | 0 | -4198.536 |
| 371 | 1 | M75 | 1 | 0 | -75.873 | 0 | -22.703 | 0 | -4198.527 |
| 372 | | | 2 | 0 | -78.943 | 0 | -22.703 | 0 | -4053.388 |
| 373 | | | 3 | 0 | -82.013 | 0 | -22.703 | 0 | -3902.492 |
| 374 | | | 4 | 0 | -85.084 | 0 | -22.703 | 0 | -3745.839 |
| 375 | | | 5 | 0 | -88.154 | 0 | -22.703 | 0 | -3583.43 |
| 376 | 1 | M76 | 1 | 0 | -97.857 | 0 | 13.45 | 0 | -3587.79 |
| 377 | | | 2 | 0 | -100.927 | 0 | 13.45 | 0 | -3401.431 |
| 378 | | | 3 | 0 | -103.997 | 0 | 13.45 | 0 | -3209.316 |
| 379 | | | 4 | 0 | -107.067 | 0 | 13.45 | 0 | -3011.443 |
| 380 | | | 5 | 0 | -110.138 | 0 | 13.45 | 0 | -2807.814 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 381 | 1 | M77 | 1 | 0 | -110.138 | 0 | -15.747 | 0 | -2807.802 |
| 382 | | | 2 | 0 | -113.208 | 0 | -15.747 | 0 | -2598.417 |
| 383 | | | 3 | 0 | -116.278 | 0 | -15.747 | 0 | -2383.275 |
| 384 | | | 4 | 0 | -119.349 | 0 | -15.747 | 0 | -2162.376 |
| 385 | | | 5 | 0 | -122.419 | 0 | -15.747 | 0 | -1935.72 |
| 386 | 1 | M78 | 1 | 0 | -127.74 | 0 | 3.359 | 0 | -1940.868 |
| 387 | | | 2 | 0 | -129.981 | 0 | 3.359 | 0 | -1764.524 |
| 388 | | | 3 | 0 | -132.222 | 0 | 3.359 | 0 | -1585.113 |
| 389 | | | 4 | 0 | -134.463 | 0 | 3.359 | 0 | -1402.635 |
| 390 | | | 5 | 0 | -136.704 | 0 | 3.359 | 0 | -1217.09 |
| 391 | 1 | M79 | 1 | 0 | -136.704 | 0 | -5.878 | 0 | -1217.08 |
| 392 | | | 2 | 0 | -138.945 | 0 | -5.878 | 0 | -1028.47 |
| 393 | | | 3 | 0 | -141.186 | 0 | -5.878 | 0 | -836.792 |
| 394 | | | 4 | 0 | -143.427 | 0 | -5.878 | 0 | -642.048 |
| 395 | | | 5 | 0 | -145.668 | 0 | -5.878 | 0 | -444.237 |
| 396 | 1 | M80 | 1 | 0 | -147.507 | 0 | 0 | 0 | -449.67 |
| 397 | | | 2 | 0 | -148.734 | 0 | 0 | 0 | -338.633 |
| 398 | | | 3 | 0 | -149.962 | 0 | 0 | 0 | -226.675 |
| 399 | | | 4 | 0 | -151.189 | 0 | 0 | 0 | -113.798 |
| 400 | | | 5 | 0 | -152.417 | 0 | 0 | 0 | 0 |
| 401 | 1 | M81 | 1 | 0 | 143.504 | 0 | 0 | 0 | 0 |
| 402 | | | 2 | 0 | 142.149 | 0 | 0 | 0 | -106.191 |
| 403 | | | 3 | 0 | 140.794 | 0 | 0 | 0 | -211.375 |
| 404 | | | 4 | 0 | 139.439 | 0 | 0 | 0 | -315.552 |
| 405 | | | 5 | 0 | 138.083 | 0 | 0 | 0 | -418.721 |
| 406 | 1 | M82 | 1 | 0 | 136.731 | 0 | 5.93 | 0 | -418.73 |
| 407 | | | 2 | 0 | 134.021 | 0 | 5.93 | 0 | -620.034 |
| 408 | | | 3 | 0 | 131.311 | 0 | 5.93 | 0 | -817.307 |
| 409 | | | 4 | 0 | 128.601 | 0 | 5.93 | 0 | -1010.551 |
| 410 | | | 5 | 0 | 125.891 | 0 | 5.93 | 0 | -1199.765 |
| 411 | 1 | M83 | 1 | 0 | 125.891 | 0 | -4.05 | 0 | -1199.773 |
| 412 | | | 2 | 0 | 123.181 | 0 | -4.05 | 0 | -1384.958 |
| 413 | | | 3 | 0 | 120.471 | 0 | -4.05 | 0 | -1566.113 |
| 414 | | | 4 | 0 | 117.761 | 0 | -4.05 | 0 | -1743.238 |
| 415 | | | 5 | 0 | 115.051 | 0 | -4.05 | 0 | -1916.333 |
| 416 | 1 | M84 | 1 | 0 | 112.081 | 0 | 14.88 | 0 | -1916.395 |
| 417 | | | 2 | 0 | 108.694 | 0 | 14.88 | 0 | -2121.577 |
| 418 | | | 3 | 0 | 105.306 | 0 | 14.88 | 0 | -2320.463 |
| 419 | | | 4 | 0 | 101.919 | 0 | 14.88 | 0 | -2513.053 |
| 420 | | | 5 | 0 | 98.531 | 0 | 14.88 | 0 | -2699.346 |
| 421 | 1 | M85 | 1 | 0 | 98.531 | 0 | -13.189 | 0 | -2699.354 |
| 422 | | | 2 | 0 | 95.144 | 0 | -13.189 | 0 | -2879.35 |
| 423 | | | 3 | 0 | 91.756 | 0 | -13.189 | 0 | -3053.049 |
| 424 | | | 4 | 0 | 88.369 | 0 | -13.189 | 0 | -3220.452 |
| 425 | | | 5 | 0 | 84.981 | 0 | -13.189 | 0 | -3381.558 |
| 426 | 1 | M86 | 1 | 0 | 80.003 | 0 | 21.049 | 0 | -3381.613 |
| 427 | | | 2 | 0 | 76.615 | 0 | 21.049 | 0 | -3527.169 |
| 428 | | | 3 | 0 | 73.228 | 0 | 21.049 | 0 | -3666.429 |
| 429 | | | 4 | 0 | 69.84 | 0 | 21.049 | 0 | -3799.392 |
| 430 | | | 5 | 0 | 66.452 | 0 | 21.049 | 0 | -3926.058 |
| 431 | 1 | M87 | 1 | 0 | 66.452 | 0 | -19.777 | 0 | -3926.065 |
| 432 | | | 2 | 0 | 63.065 | 0 | -19.777 | 0 | -4046.434 |
| 433 | | | 3 | 0 | 59.677 | 0 | -19.777 | 0 | -4160.507 |
| 434 | | | 4 | 0 | 56.29 | 0 | -19.777 | 0 | -4268.284 |
| 435 | | | 5 | 0 | 52.902 | 0 | -19.777 | 0 | -4369.763 |
| 436 | 1 | M88 | 1 | 0 | 46.477 | 0 | 24.591 | 0 | -4369.796 |
| 437 | | | 2 | 0 | 43.089 | 0 | 24.591 | 0 | -4453.036 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 438 | | | 3 | 0 | 39.702 | 0 | 24.591 | 0 | -4529.98 |
| 439 | | | 4 | 0 | 36.314 | 0 | 24.591 | 0 | -4600.627 |
| 440 | | | 5 | 0 | 32.927 | 0 | 24.591 | 0 | -4664.977 |
| 441 | 1 | M89 | 1 | 0 | 32.927 | 0 | -23.919 | 0 | -4664.981 |
| 442 | | | 2 | 0 | 29.539 | 0 | -23.919 | 0 | -4723.034 |
| 443 | | | 3 | 0 | 26.151 | 0 | -23.919 | 0 | -4774.792 |
| 444 | | | 4 | 0 | 22.764 | 0 | -23.919 | 0 | -4820.252 |
| 445 | | | 5 | 0 | 19.376 | 0 | -23.919 | 0 | -4859.416 |
| 446 | 1 | M90 | 1 | 0 | 12.351 | 0 | 25.468 | 0 | -4859.426 |
| 447 | | | 2 | 0 | 8.963 | 0 | 25.468 | 0 | -4879.235 |
| 448 | | | 3 | 0 | 5.576 | 0 | 25.468 | 0 | -4892.747 |
| 449 | | | 4 | 0 | 2.188 | 0 | 25.468 | 0 | -4899.963 |
| 450 | | | 5 | 0 | -1.199 | 0 | 25.468 | 0 | -4900.882 |
| 451 | 1 | M91 | 1 | 0 | -1.199 | 0 | -25.494 | 0 | -4900.882 |
| 452 | | | 2 | 0 | -4.587 | 0 | -25.494 | 0 | -4895.504 |
| 453 | | | 3 | 0 | -7.974 | 0 | -25.494 | 0 | -4883.83 |
| 454 | | | 4 | 0 | -11.362 | 0 | -25.494 | 0 | -4865.86 |
| 455 | | | 5 | 0 | -14.75 | 0 | -25.494 | 0 | -4841.592 |
| 456 | 1 | M92 | 1 | 0 | -21.755 | 0 | 23.711 | 0 | -4841.581 |
| 457 | | | 2 | 0 | -25.143 | 0 | 23.711 | 0 | -4797.995 |
| 458 | | | 3 | 0 | -28.53 | 0 | 23.711 | 0 | -4748.113 |
| 459 | | | 4 | 0 | -31.918 | 0 | 23.711 | 0 | -4691.934 |
| 460 | | | 5 | 0 | -35.305 | 0 | 23.711 | 0 | -4629.458 |
| 461 | 1 | M93 | 1 | 0 | -35.305 | 0 | -24.43 | 0 | -4629.455 |
| 462 | | | 2 | 0 | -38.693 | 0 | -24.43 | 0 | -4560.683 |
| 463 | | | 3 | 0 | -42.081 | 0 | -24.43 | 0 | -4485.614 |
| 464 | | | 4 | 0 | -45.468 | 0 | -24.43 | 0 | -4404.249 |
| 465 | | | 5 | 0 | -48.856 | 0 | -24.43 | 0 | -4316.588 |
| 466 | 1 | M94 | 1 | 0 | -55.212 | 0 | 19.393 | 0 | -4316.553 |
| 467 | | | 2 | 0 | -58.6 | 0 | 19.393 | 0 | -4210.779 |
| 468 | | | 3 | 0 | -61.987 | 0 | 19.393 | 0 | -4098.709 |
| 469 | | | 4 | 0 | -65.375 | 0 | 19.393 | 0 | -3980.342 |
| 470 | | | 5 | 0 | -68.763 | 0 | 19.393 | 0 | -3855.678 |
| 471 | 1 | M95 | 1 | 0 | -68.763 | 0 | -20.701 | 0 | -3855.671 |
| 472 | | | 2 | 0 | -72.15 | 0 | -20.701 | 0 | -3724.711 |
| 473 | | | 3 | 0 | -75.538 | 0 | -20.701 | 0 | -3587.454 |
| 474 | | | 4 | 0 | -78.925 | 0 | -20.701 | 0 | -3443.901 |
| 475 | | | 5 | 0 | -82.313 | 0 | -20.701 | 0 | -3294.051 |
| 476 | 1 | M96 | 1 | 0 | -87.139 | 0 | 12.64 | 0 | -3293.993 |
| 477 | | | 2 | 0 | -90.527 | 0 | 12.64 | 0 | -3128.875 |
| 478 | | | 3 | 0 | -93.914 | 0 | 12.64 | 0 | -2957.461 |
| 479 | | | 4 | 0 | -97.302 | 0 | 12.64 | 0 | -2779.75 |
| 480 | | | 5 | 0 | -100.689 | 0 | 12.64 | 0 | -2595.742 |
| 481 | 1 | M97 | 1 | 0 | -100.689 | 0 | -14.353 | 0 | -2595.733 |
| 482 | | | 2 | 0 | -104.077 | 0 | -14.353 | 0 | -2405.429 |
| 483 | | | 3 | 0 | -107.465 | 0 | -14.353 | 0 | -2208.829 |
| 484 | | | 4 | 0 | -110.852 | 0 | -14.353 | 0 | -2005.932 |
| 485 | | | 5 | 0 | -114.24 | 0 | -14.353 | 0 | -1796.738 |
| 486 | 1 | M98 | 1 | 0 | -117.045 | 0 | 3.364 | 0 | -1796.676 |
| 487 | | | 2 | 0 | -119.517 | 0 | 3.364 | 0 | -1636.213 |
| 488 | | | 3 | 0 | -121.99 | 0 | 3.364 | 0 | -1472.395 |
| 489 | | | 4 | 0 | -124.462 | 0 | 3.364 | 0 | -1305.223 |
| 490 | | | 5 | 0 | -126.935 | 0 | 3.364 | 0 | -1134.697 |
| 491 | 1 | M99 | 1 | 0 | -126.935 | 0 | -5.248 | 0 | -1134.69 |
| 492 | | | 2 | 0 | -129.407 | 0 | -5.248 | 0 | -960.81 |
| 493 | | | 3 | 0 | -131.879 | 0 | -5.248 | 0 | -783.576 |
| 494 | | | 4 | 0 | -134.352 | 0 | -5.248 | 0 | -602.988 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 495 | | | 5 | 0 | -136.824 | 0 | -5.248 | 0 | -419.045 |
| 496 | 1 | M100 | 1 | 0 | -138.26 | 0 | 0 | 0 | -419.041 |
| 497 | | | 2 | 0 | -139.615 | 0 | 0 | 0 | -315.791 |
| 498 | | | 3 | 0 | -140.969 | 0 | 0 | 0 | -211.534 |
| 499 | | | 4 | 0 | -142.324 | 0 | 0 | 0 | -106.27 |
| 500 | | | 5 | 0 | -143.678 | 0 | 0 | 0 | 0 |
| 501 | 1 | M101 | 1 | 0 | 141.464 | 0 | 0 | 0 | 0 |
| 502 | | | 2 | 0 | 140.121 | 0 | 0 | 0 | -103.765 |
| 503 | | | 3 | 0 | 138.778 | 0 | 0 | 0 | -206.539 |
| 504 | | | 4 | 0 | 137.435 | 0 | 0 | 0 | -308.324 |
| 505 | | | 5 | 0 | 136.092 | 0 | 0 | 0 | -409.119 |
| 506 | 1 | M102 | 1 | 0 | 134.249 | 0 | 5.789 | 0 | -409.88 |
| 507 | | | 2 | 0 | 131.563 | 0 | 5.789 | 0 | -605.783 |
| 508 | | | 3 | 0 | 128.877 | 0 | 5.789 | 0 | -797.727 |
| 509 | | | 4 | 0 | 126.19 | 0 | 5.789 | 0 | -985.711 |
| 510 | | | 5 | 0 | 123.504 | 0 | 5.789 | 0 | -1169.735 |
| 511 | 1 | M103 | 1 | 0 | 123.504 | 0 | -3.942 | 0 | -1169.743 |
| 512 | | | 2 | 0 | 120.818 | 0 | -3.942 | 0 | -1349.807 |
| 513 | | | 3 | 0 | 118.131 | 0 | -3.942 | 0 | -1525.913 |
| 514 | | | 4 | 0 | 115.445 | 0 | -3.942 | 0 | -1698.058 |
| 515 | | | 5 | 0 | 112.758 | 0 | -3.942 | 0 | -1866.244 |
| 516 | 1 | M104 | 1 | 0 | 108.777 | 0 | 14.447 | 0 | -1867.035 |
| 517 | | | 2 | 0 | 105.419 | 0 | 14.447 | 0 | -2064.363 |
| 518 | | | 3 | 0 | 102.061 | 0 | 14.447 | 0 | -2255.505 |
| 519 | | | 4 | 0 | 98.703 | 0 | 14.447 | 0 | -2440.459 |
| 520 | | | 5 | 0 | 95.345 | 0 | 14.447 | 0 | -2619.226 |
| 521 | 1 | M105 | 1 | 0 | 95.345 | 0 | -12.789 | 0 | -2619.235 |
| 522 | | | 2 | 0 | 91.987 | 0 | -12.789 | 0 | -2791.814 |
| 523 | | | 3 | 0 | 88.629 | 0 | -12.789 | 0 | -2958.207 |
| 524 | | | 4 | 0 | 85.272 | 0 | -12.789 | 0 | -3118.413 |
| 525 | | | 5 | 0 | 81.914 | 0 | -12.789 | 0 | -3272.431 |
| 526 | 1 | M106 | 1 | 0 | 76.789 | 0 | 20.327 | 0 | -3272.966 |
| 527 | | | 2 | 0 | 73.431 | 0 | 20.327 | 0 | -3411.357 |
| 528 | | | 3 | 0 | 70.073 | 0 | 20.327 | 0 | -3543.56 |
| 529 | | | 4 | 0 | 66.715 | 0 | 20.327 | 0 | -3669.576 |
| 530 | | | 5 | 0 | 63.357 | 0 | 20.327 | 0 | -3789.405 |
| 531 | 1 | M107 | 1 | 0 | 63.357 | 0 | -19.078 | 0 | -3789.411 |
| 532 | | | 2 | 0 | 59.999 | 0 | -19.078 | 0 | -3903.053 |
| 533 | | | 3 | 0 | 56.641 | 0 | -19.078 | 0 | -4010.508 |
| 534 | | | 4 | 0 | 53.283 | 0 | -19.078 | 0 | -4111.776 |
| 535 | | | 5 | 0 | 49.925 | 0 | -19.078 | 0 | -4206.857 |
| 536 | 1 | M108 | 1 | 0 | 44.604 | 0 | 23.656 | 0 | -4207.182 |
| 537 | | | 2 | 0 | 41.246 | 0 | 23.656 | 0 | -4286.271 |
| 538 | | | 3 | 0 | 37.888 | 0 | 23.656 | 0 | -4359.173 |
| 539 | | | 4 | 0 | 34.53 | 0 | 23.656 | 0 | -4425.888 |
| 540 | | | 5 | 0 | 31.172 | 0 | 23.656 | 0 | -4486.416 |
| 541 | 1 | M109 | 1 | 0 | 31.172 | 0 | -22.996 | 0 | -4486.42 |
| 542 | | | 2 | 0 | 27.814 | 0 | -22.996 | 0 | -4540.761 |
| 543 | | | 3 | 0 | 24.456 | 0 | -22.996 | 0 | -4588.915 |
| 544 | | | 4 | 0 | 21.098 | 0 | -22.996 | 0 | -4630.882 |
| 545 | | | 5 | 0 | 17.74 | 0 | -22.996 | 0 | -4666.662 |
| 546 | 1 | M110 | 1 | 0 | 12.299 | 0 | 24.466 | 0 | -4666.767 |
| 547 | | | 2 | 0 | 8.941 | 0 | 24.466 | 0 | -4686.335 |
| 548 | | | 3 | 0 | 5.583 | 0 | 24.466 | 0 | -4699.716 |
| 549 | | | 4 | 0 | 2.226 | 0 | 24.466 | 0 | -4706.91 |
| 550 | | | 5 | 0 | -1.132 | 0 | 24.466 | 0 | -4707.917 |
| 551 | 1 | M111 | 1 | 0 | -1.132 | 0 | -24.49 | 0 | -4707.917 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 552 | | | 2 | 0 | -4.49 | 0 | -24.49 | 0 | -4702.737 |
| 553 | | | 3 | 0 | -7.848 | 0 | -24.49 | 0 | -4691.37 |
| 554 | | | 4 | 0 | -11.206 | 0 | -24.49 | 0 | -4673.816 |
| 555 | | | 5 | 0 | -14.564 | 0 | -24.49 | 0 | -4650.075 |
| 556 | 1 | M112 | 1 | 0 | -20 | 0 | 22.8 | 0 | -4649.954 |
| 557 | | | 2 | 0 | -23.358 | 0 | 22.8 | 0 | -4610.011 |
| 558 | | | 3 | 0 | -26.716 | 0 | 22.8 | 0 | -4563.881 |
| 559 | | | 4 | 0 | -30.074 | 0 | 22.8 | 0 | -4511.564 |
| 560 | | | 5 | 0 | -33.432 | 0 | 22.8 | 0 | -4453.06 |
| 561 | 1 | M113 | 1 | 0 | -33.432 | 0 | -23.506 | 0 | -4453.056 |
| 562 | | | 2 | 0 | -36.79 | 0 | -23.506 | 0 | -4388.365 |
| 563 | | | 3 | 0 | -40.148 | 0 | -23.506 | 0 | -4317.487 |
| 564 | | | 4 | 0 | -43.505 | 0 | -23.506 | 0 | -4240.422 |
| 565 | | | 5 | 0 | -46.863 | 0 | -23.506 | 0 | -4157.17 |
| 566 | 1 | M114 | 1 | 0 | -52.17 | 0 | 18.715 | 0 | -4156.83 |
| 567 | | | 2 | 0 | -55.528 | 0 | 18.715 | 0 | -4057.613 |
| 568 | | | 3 | 0 | -58.886 | 0 | 18.715 | 0 | -3952.209 |
| 569 | | | 4 | 0 | -62.244 | 0 | 18.715 | 0 | -3840.618 |
| 570 | | | 5 | 0 | -65.602 | 0 | 18.715 | 0 | -3722.84 |
| 571 | 1 | M115 | 1 | 0 | -65.602 | 0 | -19.998 | 0 | -3722.833 |
| 572 | | | 2 | 0 | -68.96 | 0 | -19.998 | 0 | -3598.868 |
| 573 | | | 3 | 0 | -72.318 | 0 | -19.998 | 0 | -3468.717 |
| 574 | | | 4 | 0 | -75.676 | 0 | -19.998 | 0 | -3332.378 |
| 575 | | | 5 | 0 | -79.034 | 0 | -19.998 | 0 | -3189.852 |
| 576 | 1 | M116 | 1 | 0 | -84.126 | 0 | 12.262 | 0 | -3189.302 |
| 577 | | | 2 | 0 | -87.484 | 0 | 12.262 | 0 | -3031.206 |
| 578 | | | 3 | 0 | -90.842 | 0 | 12.262 | 0 | -2866.922 |
| 579 | | | 4 | 0 | -94.2 | 0 | 12.262 | 0 | -2696.452 |
| 580 | | | 5 | 0 | -97.558 | 0 | 12.262 | 0 | -2519.795 |
| 581 | 1 | M117 | 1 | 0 | -97.558 | 0 | -13.941 | 0 | -2519.786 |
| 582 | | | 2 | 0 | -100.916 | 0 | -13.941 | 0 | -2336.942 |
| 583 | | | 3 | 0 | -104.274 | 0 | -13.941 | 0 | -2147.912 |
| 584 | | | 4 | 0 | -107.632 | 0 | -13.941 | 0 | -1952.694 |
| 585 | | | 5 | 0 | -110.99 | 0 | -13.941 | 0 | -1751.289 |
| 586 | 1 | M118 | 1 | 0 | -114.811 | 0 | 3.273 | 0 | -1750.477 |
| 587 | | | 2 | 0 | -117.262 | 0 | 3.273 | 0 | -1594.434 |
| 588 | | | 3 | 0 | -119.713 | 0 | 3.273 | 0 | -1435.095 |
| 589 | | | 4 | 0 | -122.164 | 0 | 3.273 | 0 | -1272.46 |
| 590 | | | 5 | 0 | -124.615 | 0 | 3.273 | 0 | -1106.53 |
| 591 | 1 | M119 | 1 | 0 | -124.615 | 0 | -5.125 | 0 | -1106.523 |
| 592 | | | 2 | 0 | -127.066 | 0 | -5.125 | 0 | -937.297 |
| 593 | | | 3 | 0 | -129.516 | 0 | -5.125 | 0 | -764.775 |
| 594 | | | 4 | 0 | -131.967 | 0 | -5.125 | 0 | -588.958 |
| 595 | | | 5 | 0 | -134.418 | 0 | -5.125 | 0 | -409.845 |
| 596 | 1 | M120 | 1 | 0 | -136.155 | 0 | 0 | 0 | -409.106 |
| 597 | | | 2 | 0 | -137.498 | 0 | 0 | 0 | -308.313 |
| 598 | | | 3 | 0 | -138.841 | 0 | 0 | 0 | -206.531 |
| 599 | | | 4 | 0 | -140.183 | 0 | 0 | 0 | -103.76 |
| 600 | | | 5 | 0 | -141.526 | 0 | 0 | 0 | 0 |
| 601 | 1 | M121 | 1 | 0 | 100.141 | 0 | 0 | 0 | 0 |
| 602 | | | 2 | 0 | 98.883 | 0 | 0 | 0 | -72.694 |
| 603 | | | 3 | 0 | 97.624 | 0 | 0 | 0 | -144.468 |
| 604 | | | 4 | 0 | 96.366 | 0 | 0 | 0 | -215.323 |
| 605 | | | 5 | 0 | 95.108 | 0 | 0 | 0 | -285.259 |
| 606 | 1 | M122 | 1 | 0 | 94.508 | 0 | 3.66 | 0 | -284.422 |
| 607 | | | 2 | 0 | 91.991 | 0 | 3.66 | 0 | -420.66 |
| 608 | | | 3 | 0 | 89.475 | 0 | 3.66 | 0 | -553.22 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 609 | | | 4 | 0 | 86.958 | 0 | 3.66 | 0 | -682.104 |
| 610 | | | 5 | 0 | 84.441 | 0 | 3.66 | 0 | -807.311 |
| 611 | 1 | M123 | 1 | 0 | 84.441 | 0 | -3.056 | 0 | -807.314 |
| 612 | | | 2 | 0 | 81.925 | 0 | -3.056 | 0 | -928.845 |
| 613 | | | 3 | 0 | 79.408 | 0 | -3.056 | 0 | -1046.699 |
| 614 | | | 4 | 0 | 76.892 | 0 | -3.056 | 0 | -1160.876 |
| 615 | | | 5 | 0 | 74.375 | 0 | -3.056 | 0 | -1271.377 |
| 616 | 1 | M124 | 1 | 0 | 76.058 | 0 | 9.525 | 0 | -1270.615 |
| 617 | | | 2 | 0 | 72.913 | 0 | 9.525 | 0 | -1406.644 |
| 618 | | | 3 | 0 | 69.767 | 0 | 9.525 | 0 | -1536.928 |
| 619 | | | 4 | 0 | 66.621 | 0 | 9.525 | 0 | -1661.468 |
| 620 | | | 5 | 0 | 63.475 | 0 | 9.525 | 0 | -1780.262 |
| 621 | 1 | M125 | 1 | 0 | 63.475 | 0 | -8.987 | 0 | -1780.265 |
| 622 | | | 2 | 0 | 60.33 | 0 | -8.987 | 0 | -1893.314 |
| 623 | | | 3 | 0 | 57.184 | 0 | -8.987 | 0 | -2000.618 |
| 624 | | | 4 | 0 | 54.038 | 0 | -8.987 | 0 | -2102.178 |
| 625 | | | 5 | 0 | 50.893 | 0 | -8.987 | 0 | -2197.993 |
| 626 | 1 | M126 | 1 | 0 | 54.345 | 0 | 13.452 | 0 | -2197.514 |
| 627 | | | 2 | 0 | 51.2 | 0 | 13.452 | 0 | -2293.89 |
| 628 | | | 3 | 0 | 48.054 | 0 | 13.452 | 0 | -2384.521 |
| 629 | | | 4 | 0 | 44.908 | 0 | 13.452 | 0 | -2469.407 |
| 630 | | | 5 | 0 | 41.763 | 0 | 13.452 | 0 | -2548.548 |
| 631 | 1 | M127 | 1 | 0 | 41.763 | 0 | -13.049 | 0 | -2548.55 |
| 632 | | | 2 | 0 | 38.617 | 0 | -13.049 | 0 | -2621.947 |
| 633 | | | 3 | 0 | 35.471 | 0 | -13.049 | 0 | -2689.598 |
| 634 | | | 4 | 0 | 32.325 | 0 | -13.049 | 0 | -2751.505 |
| 635 | | | 5 | 0 | 29.18 | 0 | -13.049 | 0 | -2807.667 |
| 636 | 1 | M128 | 1 | 0 | 33.03 | 0 | 15.718 | 0 | -2807.407 |
| 637 | | | 2 | 0 | 29.884 | 0 | 15.718 | 0 | -2864.855 |
| 638 | | | 3 | 0 | 26.738 | 0 | 15.718 | 0 | -2916.559 |
| 639 | | | 4 | 0 | 23.593 | 0 | 15.718 | 0 | -2962.517 |
| 640 | | | 5 | 0 | 20.447 | 0 | 15.718 | 0 | -3002.731 |
| 641 | 1 | M129 | 1 | 0 | 20.447 | 0 | -15.506 | 0 | -3002.732 |
| 642 | | | 2 | 0 | 17.301 | 0 | -15.506 | 0 | -3037.201 |
| 643 | | | 3 | 0 | 14.156 | 0 | -15.506 | 0 | -3065.925 |
| 644 | | | 4 | 0 | 11.01 | 0 | -15.506 | 0 | -3088.904 |
| 645 | | | 5 | 0 | 7.864 | 0 | -15.506 | 0 | -3106.138 |
| 646 | 1 | M130 | 1 | 0 | 11.843 | 0 | 16.357 | 0 | -3106.06 |
| 647 | | | 2 | 0 | 8.697 | 0 | 16.357 | 0 | -3124.816 |
| 648 | | | 3 | 0 | 5.552 | 0 | 16.357 | 0 | -3137.827 |
| 649 | | | 4 | 0 | 2.406 | 0 | 16.357 | 0 | -3145.093 |
| 650 | | | 5 | 0 | -.74 | 0 | 16.357 | 0 | -3146.614 |
| 651 | 1 | M131 | 1 | 0 | -.74 | 0 | -16.364 | 0 | -3146.614 |
| 652 | | | 2 | 0 | -3.885 | 0 | -16.364 | 0 | -3142.391 |
| 653 | | | 3 | 0 | -7.031 | 0 | -16.364 | 0 | -3132.423 |
| 654 | | | 4 | 0 | -10.177 | 0 | -16.364 | 0 | -3116.71 |
| 655 | | | 5 | 0 | -13.323 | 0 | -16.364 | 0 | -3095.252 |
| 656 | 1 | M132 | 1 | 0 | -9.348 | 0 | 15.386 | 0 | -3095.342 |
| 657 | | | 2 | 0 | -12.494 | 0 | 15.386 | 0 | -3075.398 |
| 658 | | | 3 | 0 | -15.64 | 0 | 15.386 | 0 | -3049.709 |
| 659 | | | 4 | 0 | -18.785 | 0 | 15.386 | 0 | -3018.274 |
| 660 | | | 5 | 0 | -21.931 | 0 | 15.386 | 0 | -2981.095 |
| 661 | 1 | M133 | 1 | 0 | -21.931 | 0 | -15.613 | 0 | -2981.094 |
| 662 | | | 2 | 0 | -25.077 | 0 | -15.613 | 0 | -2938.17 |
| 663 | | | 3 | 0 | -28.222 | 0 | -15.613 | 0 | -2889.502 |
| 664 | | | 4 | 0 | -31.368 | 0 | -15.613 | 0 | -2835.088 |
| 665 | | | 5 | 0 | -34.514 | 0 | -15.613 | 0 | -2774.93 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 666 | 1 | M134 | 1 | 0 | -30.68 | 0 | 12.818 | 0 | -2775.203 |
| 667 | | | 2 | 0 | -33.826 | 0 | 12.818 | 0 | -2716.301 |
| 668 | | | 3 | 0 | -36.972 | 0 | 12.818 | 0 | -2651.653 |
| 669 | | | 4 | 0 | -40.118 | 0 | 12.818 | 0 | -2581.261 |
| 670 | | | 5 | 0 | -43.263 | 0 | 12.818 | 0 | -2505.124 |
| 671 | 1 | M135 | 1 | 0 | -43.263 | 0 | -13.232 | 0 | -2505.122 |
| 672 | | | 2 | 0 | -46.409 | 0 | -13.232 | 0 | -2423.24 |
| 673 | | | 3 | 0 | -49.555 | 0 | -13.232 | 0 | -2335.613 |
| 674 | | | 4 | 0 | -52.7 | 0 | -13.232 | 0 | -2242.242 |
| 675 | | | 5 | 0 | -55.846 | 0 | -13.232 | 0 | -2143.125 |
| 676 | 1 | M136 | 1 | 0 | -52.439 | 0 | 8.642 | 0 | -2143.621 |
| 677 | | | 2 | 0 | -55.585 | 0 | 8.642 | 0 | -2044.982 |
| 678 | | | 3 | 0 | -58.73 | 0 | 8.642 | 0 | -1940.598 |
| 679 | | | 4 | 0 | -61.876 | 0 | 8.642 | 0 | -1830.469 |
| 680 | | | 5 | 0 | -65.022 | 0 | 8.642 | 0 | -1714.595 |
| 681 | 1 | M137 | 1 | 0 | -65.022 | 0 | -9.187 | 0 | -1714.592 |
| 682 | | | 2 | 0 | -68.168 | 0 | -9.187 | 0 | -1592.974 |
| 683 | | | 3 | 0 | -71.313 | 0 | -9.187 | 0 | -1465.611 |
| 684 | | | 4 | 0 | -74.459 | 0 | -9.187 | 0 | -1332.503 |
| 685 | | | 5 | 0 | -77.605 | 0 | -9.187 | 0 | -1193.65 |
| 686 | 1 | M138 | 1 | 0 | -76.132 | 0 | 2.596 | 0 | -1194.432 |
| 687 | | | 2 | 0 | -78.428 | 0 | 2.596 | 0 | -1091.425 |
| 688 | | | 3 | 0 | -80.724 | 0 | 2.596 | 0 | -985.357 |
| 689 | | | 4 | 0 | -83.02 | 0 | 2.596 | 0 | -876.229 |
| 690 | | | 5 | 0 | -85.316 | 0 | 2.596 | 0 | -764.041 |
| 691 | 1 | M139 | 1 | 0 | -85.316 | 0 | -3.202 | 0 | -764.039 |
| 692 | | | 2 | 0 | -87.612 | 0 | -3.202 | 0 | -648.791 |
| 693 | | | 3 | 0 | -89.908 | 0 | -3.202 | 0 | -530.482 |
| 694 | | | 4 | 0 | -92.204 | 0 | -3.202 | 0 | -409.113 |
| 695 | | | 5 | 0 | -94.499 | 0 | -3.202 | 0 | -284.684 |
| 696 | 1 | M140 | 1 | 0 | -95.241 | 0 | 0 | 0 | -285.509 |
| 697 | | | 2 | 0 | -96.499 | 0 | 0 | 0 | -215.509 |
| 698 | | | 3 | 0 | -97.757 | 0 | 0 | 0 | -144.591 |
| 699 | | | 4 | 0 | -99.014 | 0 | 0 | 0 | -72.755 |
| 700 | | | 5 | 0 | -100.272 | 0 | 0 | 0 | 0 |
| 701 | 1 | M141 | 1 | 0 | 97.803 | 0 | 0 | 0 | 0 |
| 702 | | | 2 | 0 | 96.556 | 0 | 0 | 0 | -70.359 |
| 703 | | | 3 | 0 | 95.309 | 0 | 0 | 0 | -139.814 |
| 704 | | | 4 | 0 | 94.062 | 0 | 0 | 0 | -208.367 |
| 705 | | | 5 | 0 | 92.815 | 0 | 0 | 0 | -276.017 |
| 706 | 1 | M142 | 1 | 0 | 92.1 | 0 | 3.561 | 0 | -275.705 |
| 707 | | | 2 | 0 | 89.606 | 0 | 3.561 | 0 | -407.26 |
| 708 | | | 3 | 0 | 87.112 | 0 | 3.561 | 0 | -535.204 |
| 709 | | | 4 | 0 | 84.618 | 0 | 3.561 | 0 | -659.536 |
| 710 | | | 5 | 0 | 82.124 | 0 | 3.561 | 0 | -780.257 |
| 711 | 1 | M143 | 1 | 0 | 82.124 | 0 | -2.93 | 0 | -780.26 |
| 712 | | | 2 | 0 | 79.629 | 0 | -2.93 | 0 | -897.369 |
| 713 | | | 3 | 0 | 77.135 | 0 | -2.93 | 0 | -1010.867 |
| 714 | | | 4 | 0 | 74.641 | 0 | -2.93 | 0 | -1120.753 |
| 715 | | | 5 | 0 | 72.147 | 0 | -2.93 | 0 | -1227.027 |
| 716 | 1 | M144 | 1 | 0 | 73.636 | 0 | 9.193 | 0 | -1226.798 |
| 717 | | | 2 | 0 | 70.518 | 0 | 9.193 | 0 | -1357.257 |
| 718 | | | 3 | 0 | 67.4 | 0 | 9.193 | 0 | -1482.073 |
| 719 | | | 4 | 0 | 64.283 | 0 | 9.193 | 0 | -1601.247 |
| 720 | | | 5 | 0 | 61.165 | 0 | 9.193 | 0 | -1714.777 |
| 721 | 1 | M145 | 1 | 0 | 61.165 | 0 | -8.638 | 0 | -1714.78 |
| 722 | | | 2 | 0 | 58.047 | 0 | -8.638 | 0 | -1822.666 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 723 | | | 3 | 0 | 54.929 | 0 | -8.638 | 0 | -1924.91 |
| 724 | | | 4 | 0 | 51.812 | 0 | -8.638 | 0 | -2021.511 |
| 725 | | | 5 | 0 | 48.694 | 0 | -8.638 | 0 | -2112.469 |
| 726 | 1 | M146 | 1 | 0 | 52.199 | 0 | 12.918 | 0 | -2112.336 |
| 727 | | | 2 | 0 | 49.082 | 0 | 12.918 | 0 | -2203.995 |
| 728 | | | 3 | 0 | 45.964 | 0 | 12.918 | 0 | -2290.011 |
| 729 | | | 4 | 0 | 42.846 | 0 | 12.918 | 0 | -2370.385 |
| 730 | | | 5 | 0 | 39.728 | 0 | 12.918 | 0 | -2445.115 |
| 731 | 1 | M147 | 1 | 0 | 39.728 | 0 | -12.509 | 0 | -2445.117 |
| 732 | | | 2 | 0 | 36.611 | 0 | -12.509 | 0 | -2514.204 |
| 733 | | | 3 | 0 | 33.493 | 0 | -12.509 | 0 | -2577.648 |
| 734 | | | 4 | 0 | 30.375 | 0 | -12.509 | 0 | -2635.449 |
| 735 | | | 5 | 0 | 27.258 | 0 | -12.509 | 0 | -2687.606 |
| 736 | 1 | M148 | 1 | 0 | 31.806 | 0 | 15.043 | 0 | -2687.554 |
| 737 | | | 2 | 0 | 28.688 | 0 | 15.043 | 0 | -2742.301 |
| 738 | | | 3 | 0 | 25.57 | 0 | 15.043 | 0 | -2791.404 |
| 739 | | | 4 | 0 | 22.452 | 0 | 15.043 | 0 | -2834.865 |
| 740 | | | 5 | 0 | 19.335 | 0 | 15.043 | 0 | -2872.682 |
| 741 | 1 | M149 | 1 | 0 | 19.335 | 0 | -14.829 | 0 | -2872.683 |
| 742 | | | 2 | 0 | 16.217 | 0 | -14.829 | 0 | -2904.857 |
| 743 | | | 3 | 0 | 13.099 | 0 | -14.829 | 0 | -2931.389 |
| 744 | | | 4 | 0 | 9.982 | 0 | -14.829 | 0 | -2952.277 |
| 745 | | | 5 | 0 | 6.864 | 0 | -14.829 | 0 | -2967.522 |
| 746 | 1 | M150 | 1 | 0 | 11.774 | 0 | 15.634 | 0 | -2967.51 |
| 747 | | | 2 | 0 | 8.657 | 0 | 15.634 | 0 | -2985.999 |
| 748 | | | 3 | 0 | 5.539 | 0 | 15.634 | 0 | -2998.846 |
| 749 | | | 4 | 0 | 2.421 | 0 | 15.634 | 0 | -3006.05 |
| 750 | | | 5 | 0 | -.697 | 0 | 15.634 | 0 | -3007.61 |
| 751 | 1 | M151 | 1 | 0 | -.697 | 0 | -15.642 | 0 | -3007.61 |
| 752 | | | 2 | 0 | -3.814 | 0 | -15.642 | 0 | -3003.528 |
| 753 | | | 3 | 0 | -6.932 | 0 | -15.642 | 0 | -2993.802 |
| 754 | | | 4 | 0 | -10.05 | 0 | -15.642 | 0 | -2978.434 |
| 755 | | | 5 | 0 | -13.168 | 0 | -15.642 | 0 | -2957.422 |
| 756 | 1 | M152 | 1 | 0 | -8.268 | 0 | 14.716 | 0 | -2957.436 |
| 757 | | | 2 | 0 | -11.386 | 0 | 14.716 | 0 | -2939.649 |
| 758 | | | 3 | 0 | -14.504 | 0 | 14.716 | 0 | -2916.219 |
| 759 | | | 4 | 0 | -17.621 | 0 | 14.716 | 0 | -2887.146 |
| 760 | | | 5 | 0 | -20.739 | 0 | 14.716 | 0 | -2852.43 |
| 761 | 1 | M153 | 1 | 0 | -20.739 | 0 | -14.945 | 0 | -2852.429 |
| 762 | | | 2 | 0 | -23.857 | 0 | -14.945 | 0 | -2812.07 |
| 763 | | | 3 | 0 | -26.974 | 0 | -14.945 | 0 | -2766.068 |
| 764 | | | 4 | 0 | -30.092 | 0 | -14.945 | 0 | -2714.423 |
| 765 | | | 5 | 0 | -33.21 | 0 | -14.945 | 0 | -2657.135 |
| 766 | 1 | M154 | 1 | 0 | -28.707 | 0 | 12.29 | 0 | -2657.191 |
| 767 | | | 2 | 0 | -31.825 | 0 | 12.29 | 0 | -2602.409 |
| 768 | | | 3 | 0 | -34.943 | 0 | 12.29 | 0 | -2541.985 |
| 769 | | | 4 | 0 | -38.06 | 0 | 12.29 | 0 | -2475.917 |
| 770 | | | 5 | 0 | -41.178 | 0 | 12.29 | 0 | -2404.206 |
| 771 | 1 | M155 | 1 | 0 | -41.178 | 0 | -12.711 | 0 | -2404.204 |
| 772 | | | 2 | 0 | -44.296 | 0 | -12.711 | 0 | -2326.85 |
| 773 | | | 3 | 0 | -47.414 | 0 | -12.711 | 0 | -2243.853 |
| 774 | | | 4 | 0 | -50.531 | 0 | -12.711 | 0 | -2155.213 |
| 775 | | | 5 | 0 | -53.649 | 0 | -12.711 | 0 | -2060.93 |
| 776 | 1 | M156 | 1 | 0 | -50.265 | 0 | 8.308 | 0 | -2061.071 |
| 777 | | | 2 | 0 | -53.382 | 0 | 8.308 | 0 | -1967.27 |
| 778 | | | 3 | 0 | -56.5 | 0 | 8.308 | 0 | -1867.827 |
| 779 | | | 4 | 0 | -59.618 | 0 | 8.308 | 0 | -1762.74 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 780 | | | 5 | 0 | -62.736 | 0 | 8.308 | 0 | -1652.01 |
| 781 | 1 | M157 | 1 | 0 | -62.736 | 0 | -8.871 | 0 | -1652.007 |
| 782 | | | 2 | 0 | -65.853 | 0 | -8.871 | 0 | -1535.634 |
| 783 | | | 3 | 0 | -68.971 | 0 | -8.871 | 0 | -1413.618 |
| 784 | | | 4 | 0 | -72.089 | 0 | -8.871 | 0 | -1285.959 |
| 785 | | | 5 | 0 | -75.206 | 0 | -8.871 | 0 | -1152.657 |
| 786 | 1 | M158 | 1 | 0 | -73.913 | 0 | 2.485 | 0 | -1152.892 |
| 787 | | | 2 | 0 | -76.189 | 0 | 2.485 | 0 | -1053.746 |
| 788 | | | 3 | 0 | -78.464 | 0 | 2.485 | 0 | -951.593 |
| 789 | | | 4 | 0 | -80.74 | 0 | 2.485 | 0 | -846.435 |
| 790 | | | 5 | 0 | -83.015 | 0 | 2.485 | 0 | -738.27 |
| 791 | 1 | M159 | 1 | 0 | -83.015 | 0 | -3.118 | 0 | -738.268 |
| 792 | | | 2 | 0 | -85.291 | 0 | -3.118 | 0 | -627.097 |
| 793 | | | 3 | 0 | -87.566 | 0 | -3.118 | 0 | -512.921 |
| 794 | | | 4 | 0 | -89.842 | 0 | -3.118 | 0 | -395.738 |
| 795 | | | 5 | 0 | -92.117 | 0 | -3.118 | 0 | -275.55 |
| 796 | 1 | M160 | 1 | 0 | -92.809 | 0 | 0 | 0 | -275.863 |
| 797 | | | 2 | 0 | -94.055 | 0 | 0 | 0 | -208.25 |
| 798 | | | 3 | 0 | -95.302 | 0 | 0 | 0 | -139.736 |
| 799 | | | 4 | 0 | -96.548 | 0 | 0 | 0 | -70.319 |
| 800 | | | 5 | 0 | -97.795 | 0 | 0 | 0 | 0 |
| 801 | 1 | M161 | 1 | 0 | 94.457 | 0 | 0 | 0 | 0 |
| 802 | | | 2 | 0 | 93.221 | 0 | 0 | 0 | -67.33 |
| 803 | | | 3 | 0 | 91.985 | 0 | 0 | 0 | -133.773 |
| 804 | | | 4 | 0 | 90.749 | 0 | 0 | 0 | -199.329 |
| 805 | | | 5 | 0 | 89.513 | 0 | 0 | 0 | -263.998 |
| 806 | 1 | M162 | 1 | 0 | 89.023 | 0 | 3.437 | 0 | -263.685 |
| 807 | | | 2 | 0 | 86.551 | 0 | 3.437 | 0 | -389.66 |
| 808 | | | 3 | 0 | 84.079 | 0 | 3.437 | 0 | -512.087 |
| 809 | | | 4 | 0 | 81.607 | 0 | 3.437 | 0 | -630.968 |
| 810 | | | 5 | 0 | 79.136 | 0 | 3.437 | 0 | -746.301 |
| 811 | 1 | M163 | 1 | 0 | 79.136 | 0 | -2.771 | 0 | -746.304 |
| 812 | | | 2 | 0 | 76.664 | 0 | -2.771 | 0 | -858.091 |
| 813 | | | 3 | 0 | 74.192 | 0 | -2.771 | 0 | -966.33 |
| 814 | | | 4 | 0 | 71.72 | 0 | -2.771 | 0 | -1071.023 |
| 815 | | | 5 | 0 | 69.249 | 0 | -2.771 | 0 | -1172.168 |
| 816 | 1 | M164 | 1 | 0 | 71.126 | 0 | 8.806 | 0 | -1171.934 |
| 817 | | | 2 | 0 | 68.036 | 0 | 8.806 | 0 | -1296.746 |
| 818 | | | 3 | 0 | 64.947 | 0 | 8.806 | 0 | -1416.015 |
| 819 | | | 4 | 0 | 61.857 | 0 | 8.806 | 0 | -1529.742 |
| 820 | | | 5 | 0 | 58.767 | 0 | 8.806 | 0 | -1637.927 |
| 821 | 1 | M165 | 1 | 0 | 58.767 | 0 | -8.226 | 0 | -1637.93 |
| 822 | | | 2 | 0 | 55.677 | 0 | -8.226 | 0 | -1740.573 |
| 823 | | | 3 | 0 | 52.588 | 0 | -8.226 | 0 | -1837.673 |
| 824 | | | 4 | 0 | 49.498 | 0 | -8.226 | 0 | -1929.231 |
| 825 | | | 5 | 0 | 46.408 | 0 | -8.226 | 0 | -2015.247 |
| 826 | 1 | M166 | 1 | 0 | 50.288 | 0 | 12.334 | 0 | -2015.095 |
| 827 | | | 2 | 0 | 47.199 | 0 | 12.334 | 0 | -2102.528 |
| 828 | | | 3 | 0 | 44.109 | 0 | 12.334 | 0 | -2184.42 |
| 829 | | | 4 | 0 | 41.019 | 0 | 12.334 | 0 | -2260.769 |
| 830 | | | 5 | 0 | 37.929 | 0 | 12.334 | 0 | -2331.576 |
| 831 | 1 | M167 | 1 | 0 | 37.929 | 0 | -11.912 | 0 | -2331.579 |
| 832 | | | 2 | 0 | 34.84 | 0 | -11.912 | 0 | -2396.843 |
| 833 | | | 3 | 0 | 31.75 | 0 | -11.912 | 0 | -2456.566 |
| 834 | | | 4 | 0 | 28.66 | 0 | -11.912 | 0 | -2510.746 |
| 835 | | | 5 | 0 | 25.57 | 0 | -11.912 | 0 | -2559.384 |
| 836 | 1 | M168 | 1 | 0 | 30.707 | 0 | 14.331 | 0 | -2559.309 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 837 | | | 2 | 0 | 27.618 | 0 | 14.331 | 0 | -2611.619 |
| 838 | | | 3 | 0 | 24.528 | 0 | 14.331 | 0 | -2658.387 |
| 839 | | | 4 | 0 | 21.438 | 0 | 14.331 | 0 | -2699.612 |
| 840 | | | 5 | 0 | 18.348 | 0 | 14.331 | 0 | -2735.296 |
| 841 | 1 | M169 | 1 | 0 | 18.348 | 0 | -14.112 | 0 | -2735.297 |
| 842 | | | 2 | 0 | 15.259 | 0 | -14.112 | 0 | -2765.438 |
| 843 | | | 3 | 0 | 12.169 | 0 | -14.112 | 0 | -2790.037 |
| 844 | | | 4 | 0 | 9.079 | 0 | -14.112 | 0 | -2809.094 |
| 845 | | | 5 | 0 | 5.989 | 0 | -14.112 | 0 | -2822.609 |
| 846 | 1 | M170 | 1 | 0 | 11.7 | 0 | 14.878 | 0 | -2822.587 |
| 847 | | | 2 | 0 | 8.61 | 0 | 14.878 | 0 | -2840.803 |
| 848 | | | 3 | 0 | 5.521 | 0 | 14.878 | 0 | -2853.477 |
| 849 | | | 4 | 0 | 2.431 | 0 | 14.878 | 0 | -2860.608 |
| 850 | | | 5 | 0 | -.659 | 0 | 14.878 | 0 | -2862.197 |
| 851 | 1 | M171 | 1 | 0 | -.659 | 0 | -14.886 | 0 | -2862.197 |
| 852 | | | 2 | 0 | -3.749 | 0 | -14.886 | 0 | -2858.244 |
| 853 | | | 3 | 0 | -6.838 | 0 | -14.886 | 0 | -2848.749 |
| 854 | | | 4 | 0 | -9.928 | 0 | -14.886 | 0 | -2833.711 |
| 855 | | | 5 | 0 | -13.018 | 0 | -14.886 | 0 | -2813.132 |
| 856 | 1 | M172 | 1 | 0 | -7.326 | 0 | 14.006 | 0 | -2813.156 |
| 857 | | | 2 | 0 | -10.416 | 0 | 14.006 | 0 | -2797.244 |
| 858 | | | 3 | 0 | -13.506 | 0 | 14.006 | 0 | -2775.789 |
| 859 | | | 4 | 0 | -16.595 | 0 | 14.006 | 0 | -2748.792 |
| 860 | | | 5 | 0 | -19.685 | 0 | 14.006 | 0 | -2716.253 |
| 861 | 1 | M173 | 1 | 0 | -19.685 | 0 | -14.24 | 0 | -2716.252 |
| 862 | | | 2 | 0 | -22.775 | 0 | -14.24 | 0 | -2678.171 |
| 863 | | | 3 | 0 | -25.865 | 0 | -14.24 | 0 | -2634.547 |
| 864 | | | 4 | 0 | -28.954 | 0 | -14.24 | 0 | -2585.382 |
| 865 | | | 5 | 0 | -32.044 | 0 | -14.24 | 0 | -2530.674 |
| 866 | 1 | M174 | 1 | 0 | -26.971 | 0 | 11.704 | 0 | -2530.754 |
| 867 | | | 2 | 0 | -30.061 | 0 | 11.704 | 0 | -2479.604 |
| 868 | | | 3 | 0 | -33.15 | 0 | 11.704 | 0 | -2422.912 |
| 869 | | | 4 | 0 | -36.24 | 0 | 11.704 | 0 | -2360.677 |
| 870 | | | 5 | 0 | -39.33 | 0 | 11.704 | 0 | -2292.901 |
| 871 | 1 | M175 | 1 | 0 | -39.33 | 0 | -12.139 | 0 | -2292.898 |
| 872 | | | 2 | 0 | -42.419 | 0 | -12.139 | 0 | -2219.579 |
| 873 | | | 3 | 0 | -45.509 | 0 | -12.139 | 0 | -2140.718 |
| 874 | | | 4 | 0 | -48.599 | 0 | -12.139 | 0 | -2056.315 |
| 875 | | | 5 | 0 | -51.689 | 0 | -12.139 | 0 | -1966.37 |
| 876 | 1 | M176 | 1 | 0 | -47.937 | 0 | 7.912 | 0 | -1966.529 |
| 877 | | | 2 | 0 | -51.027 | 0 | 7.912 | 0 | -1877.77 |
| 878 | | | 3 | 0 | -54.117 | 0 | 7.912 | 0 | -1783.47 |
| 879 | | | 4 | 0 | -57.206 | 0 | 7.912 | 0 | -1683.626 |
| 880 | | | 5 | 0 | -60.296 | 0 | 7.912 | 0 | -1578.241 |
| 881 | 1 | M177 | 1 | 0 | -60.296 | 0 | -8.5 | 0 | -1578.238 |
| 882 | | | 2 | 0 | -63.386 | 0 | -8.5 | 0 | -1467.31 |
| 883 | | | 3 | 0 | -66.476 | 0 | -8.5 | 0 | -1350.841 |
| 884 | | | 4 | 0 | -69.565 | 0 | -8.5 | 0 | -1228.829 |
| 885 | | | 5 | 0 | -72.655 | 0 | -8.5 | 0 | -1101.275 |
| 886 | 1 | M178 | 1 | 0 | -70.987 | 0 | 2.346 | 0 | -1101.514 |
| 887 | | | 2 | 0 | -73.242 | 0 | 2.346 | 0 | -1007.102 |
| 888 | | | 3 | 0 | -75.497 | 0 | 2.346 | 0 | -909.739 |
| 889 | | | 4 | 0 | -77.752 | 0 | 2.346 | 0 | -809.423 |
| 890 | | | 5 | 0 | -80.007 | 0 | 2.346 | 0 | -706.154 |
| 891 | 1 | M179 | 1 | 0 | -80.007 | 0 | -3.014 | 0 | -706.152 |
| 892 | | | 2 | 0 | -82.262 | 0 | -3.014 | 0 | -599.931 |
| 893 | | | 3 | 0 | -84.517 | 0 | -3.014 | 0 | -490.758 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 894 | | | 4 | 0 | -86.772 | 0 | -3.014 | 0 | -378.633 |
| 895 | | | 5 | 0 | -89.027 | 0 | -3.014 | 0 | -263.555 |
| 896 | 1 | M180 | 1 | 0 | -89.513 | 0 | 0 | 0 | -263.867 |
| 897 | | | 2 | 0 | -90.748 | 0 | 0 | 0 | -199.229 |
| 898 | | | 3 | 0 | -91.983 | 0 | 0 | 0 | -133.705 |
| 899 | | | 4 | 0 | -93.219 | 0 | 0 | 0 | -67.296 |
| 900 | | | 5 | 0 | -94.454 | 0 | 0 | 0 | 0 |
| 901 | 1 | M181 | 1 | 0 | 88.207 | 0 | 0 | 0 | 0 |
| 902 | | | 2 | 0 | 87.132 | 0 | 0 | 0 | -62.333 |
| 903 | | | 3 | 0 | 86.056 | 0 | 0 | 0 | -123.902 |
| 904 | | | 4 | 0 | 84.981 | 0 | 0 | 0 | -184.706 |
| 905 | | | 5 | 0 | 83.905 | 0 | 0 | 0 | -244.746 |
| 906 | 1 | M182 | 1 | 0 | 83.431 | 0 | 3.262 | 0 | -251.016 |
| 907 | | | 2 | 0 | 81.28 | 0 | 3.262 | 0 | -368.125 |
| 908 | | | 3 | 0 | 79.129 | 0 | 3.262 | 0 | -482.176 |
| 909 | | | 4 | 0 | 76.978 | 0 | 3.262 | 0 | -593.169 |
| 910 | | | 5 | 0 | 74.827 | 0 | 3.262 | 0 | -701.103 |
| 911 | 1 | M183 | 1 | 0 | 74.827 | 0 | -2.571 | 0 | -701.106 |
| 912 | | | 2 | 0 | 72.677 | 0 | -2.571 | 0 | -805.982 |
| 913 | | | 3 | 0 | 70.526 | 0 | -2.571 | 0 | -907.799 |
| 914 | | | 4 | 0 | 68.375 | 0 | -2.571 | 0 | -1006.559 |
| 915 | | | 5 | 0 | 66.224 | 0 | -2.571 | 0 | -1102.259 |
| 916 | 1 | M184 | 1 | 0 | 66.347 | 0 | 8.315 | 0 | -1108.126 |
| 917 | | | 2 | 0 | 63.659 | 0 | 8.315 | 0 | -1223.67 |
| 918 | | | 3 | 0 | 60.97 | 0 | 8.315 | 0 | -1334.435 |
| 919 | | | 4 | 0 | 58.282 | 0 | 8.315 | 0 | -1440.421 |
| 920 | | | 5 | 0 | 55.594 | 0 | 8.315 | 0 | -1541.628 |
| 921 | 1 | M185 | 1 | 0 | 55.594 | 0 | -7.716 | 0 | -1541.631 |
| 922 | | | 2 | 0 | 52.905 | 0 | -7.716 | 0 | -1638.06 |
| 923 | | | 3 | 0 | 50.217 | 0 | -7.716 | 0 | -1729.709 |
| 924 | | | 4 | 0 | 47.528 | 0 | -7.716 | 0 | -1816.58 |
| 925 | | | 5 | 0 | 44.84 | 0 | -7.716 | 0 | -1898.672 |
| 926 | 1 | M186 | 1 | 0 | 46.502 | 0 | 11.633 | 0 | -1903.336 |
| 927 | | | 2 | 0 | 43.814 | 0 | 11.633 | 0 | -1983.605 |
| 928 | | | 3 | 0 | 41.125 | 0 | 11.633 | 0 | -2059.094 |
| 929 | | | 4 | 0 | 38.437 | 0 | 11.633 | 0 | -2129.805 |
| 930 | | | 5 | 0 | 35.748 | 0 | 11.633 | 0 | -2195.737 |
| 931 | 1 | M187 | 1 | 0 | 35.748 | 0 | -11.2 | 0 | -2195.74 |
| 932 | | | 2 | 0 | 33.06 | 0 | -11.2 | 0 | -2256.893 |
| 933 | | | 3 | 0 | 30.371 | 0 | -11.2 | 0 | -2313.267 |
| 934 | | | 4 | 0 | 27.683 | 0 | -11.2 | 0 | -2364.863 |
| 935 | | | 5 | 0 | 24.994 | 0 | -11.2 | 0 | -2411.68 |
| 936 | 1 | M188 | 1 | 0 | 27.93 | 0 | 13.501 | 0 | -2414.653 |
| 937 | | | 2 | 0 | 25.241 | 0 | 13.501 | 0 | -2461.909 |
| 938 | | | 3 | 0 | 22.553 | 0 | 13.501 | 0 | -2504.386 |
| 939 | | | 4 | 0 | 19.864 | 0 | 13.501 | 0 | -2542.084 |
| 940 | | | 5 | 0 | 17.176 | 0 | 13.501 | 0 | -2575.003 |
| 941 | 1 | M189 | 1 | 0 | 17.176 | 0 | -13.277 | 0 | -2575.004 |
| 942 | | | 2 | 0 | 14.487 | 0 | -13.277 | 0 | -2603.145 |
| 943 | | | 3 | 0 | 11.799 | 0 | -13.277 | 0 | -2626.507 |
| 944 | | | 4 | 0 | 9.11 | 0 | -13.277 | 0 | -2645.09 |
| 945 | | | 5 | 0 | 6.422 | 0 | -13.277 | 0 | -2658.894 |
| 946 | 1 | M190 | 1 | 0 | 10.14 | 0 | 14.002 | 0 | -2659.87 |
| 947 | | | 2 | 0 | 7.452 | 0 | 14.002 | 0 | -2675.505 |
| 948 | | | 3 | 0 | 4.763 | 0 | 14.002 | 0 | -2686.361 |
| 949 | | | 4 | 0 | 2.075 | 0 | 14.002 | 0 | -2692.438 |
| 950 | | | 5 | 0 | -.614 | 0 | 14.002 | 0 | -2693.736 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 951 | 1 | M191 | 1 | 0 | -.614 | 0 | -14.01 | 0 | -2693.736 |
| 952 | | | 2 | 0 | -3.302 | 0 | -14.01 | 0 | -2690.256 |
| 953 | | | 3 | 0 | -5.991 | 0 | -14.01 | 0 | -2681.996 |
| 954 | | | 4 | 0 | -8.679 | 0 | -14.01 | 0 | -2668.959 |
| 955 | | | 5 | 0 | -11.368 | 0 | -14.01 | 0 | -2651.142 |
| 956 | 1 | M192 | 1 | 0 | -7.681 | 0 | 13.176 | 0 | -2650.019 |
| 957 | | | 2 | 0 | -10.369 | 0 | 13.176 | 0 | -2633.976 |
| 958 | | | 3 | 0 | -13.058 | 0 | 13.176 | 0 | -2613.155 |
| 959 | | | 4 | 0 | -15.746 | 0 | 13.176 | 0 | -2587.556 |
| 960 | | | 5 | 0 | -18.435 | 0 | 13.176 | 0 | -2557.177 |
| 961 | 1 | M193 | 1 | 0 | -18.435 | 0 | -13.416 | 0 | -2557.176 |
| 962 | | | 2 | 0 | -21.123 | 0 | -13.416 | 0 | -2522.019 |
| 963 | | | 3 | 0 | -23.812 | 0 | -13.416 | 0 | -2482.083 |
| 964 | | | 4 | 0 | -26.5 | 0 | -13.416 | 0 | -2437.368 |
| 965 | | | 5 | 0 | -29.189 | 0 | -13.416 | 0 | -2387.874 |
| 966 | 1 | M194 | 1 | 0 | -26.333 | 0 | 11.004 | 0 | -2384.769 |
| 967 | | | 2 | 0 | -29.022 | 0 | 11.004 | 0 | -2335.572 |
| 968 | | | 3 | 0 | -31.71 | 0 | 11.004 | 0 | -2281.596 |
| 969 | | | 4 | 0 | -34.399 | 0 | 11.004 | 0 | -2222.841 |
| 970 | | | 5 | 0 | -37.087 | 0 | 11.004 | 0 | -2159.308 |
| 971 | 1 | M195 | 1 | 0 | -37.087 | 0 | -11.45 | 0 | -2159.305 |
| 972 | | | 2 | 0 | -39.776 | 0 | -11.45 | 0 | -2090.993 |
| 973 | | | 3 | 0 | -42.464 | 0 | -11.45 | 0 | -2017.902 |
| 974 | | | 4 | 0 | -45.153 | 0 | -11.45 | 0 | -1940.033 |
| 975 | | | 5 | 0 | -47.841 | 0 | -11.45 | 0 | -1857.384 |
| 976 | 1 | M196 | 1 | 0 | -46.262 | 0 | 7.419 | 0 | -1852.617 |
| 977 | | | 2 | 0 | -48.951 | 0 | 7.419 | 0 | -1767.995 |
| 978 | | | 3 | 0 | -51.639 | 0 | 7.419 | 0 | -1678.595 |
| 979 | | | 4 | 0 | -54.328 | 0 | 7.419 | 0 | -1584.416 |
| 980 | | | 5 | 0 | -57.016 | 0 | 7.419 | 0 | -1485.459 |
| 981 | 1 | M197 | 1 | 0 | -57.016 | 0 | -8.028 | 0 | -1485.456 |
| 982 | | | 2 | 0 | -59.705 | 0 | -8.028 | 0 | -1381.719 |
| 983 | | | 3 | 0 | -62.393 | 0 | -8.028 | 0 | -1273.205 |
| 984 | | | 4 | 0 | -65.082 | 0 | -8.028 | 0 | -1159.911 |
| 985 | | | 5 | 0 | -67.77 | 0 | -8.028 | 0 | -1041.838 |
| 986 | 1 | M198 | 1 | 0 | -67.757 | 0 | 2.173 | 0 | -1035.91 |
| 987 | | | 2 | 0 | -69.719 | 0 | 2.173 | 0 | -946.734 |
| 988 | | | 3 | 0 | -71.681 | 0 | 2.173 | 0 | -855.012 |
| 989 | | | 4 | 0 | -73.643 | 0 | 2.173 | 0 | -760.745 |
| 990 | | | 5 | 0 | -75.606 | 0 | 2.173 | 0 | -663.931 |
| 991 | 1 | M199 | 1 | 0 | -75.606 | 0 | -2.866 | 0 | -663.929 |
| 992 | | | 2 | 0 | -77.568 | 0 | -2.866 | 0 | -564.57 |
| 993 | | | 3 | 0 | -79.53 | 0 | -2.866 | 0 | -462.666 |
| 994 | | | 4 | 0 | -81.492 | 0 | -2.866 | 0 | -358.216 |
| 995 | | | 5 | 0 | -83.455 | 0 | -2.866 | 0 | -251.22 |
| 996 | 1 | M200 | 1 | 0 | -84.023 | 0 | 0 | 0 | -244.96 |
| 997 | | | 2 | 0 | -85.098 | 0 | 0 | 0 | -184.866 |
| 998 | | | 3 | 0 | -86.173 | 0 | 0 | 0 | -124.008 |
| 999 | | | 4 | 0 | -87.248 | 0 | 0 | 0 | -62.386 |
| 1000 | | | 5 | 0 | -88.323 | 0 | 0 | 0 | 0 |

STR
IV

## Joint Boundary Conditions

| | Joint Label | X [k/in] | Y [k/in] | Z [k/in] | X Rot.[k-ft/rad] | Y Rot.[k-ft/rad] | Z Rot.[k-ft/rad] | Footing |
|---|---|---|---|---|---|---|---|---|
| 1 | N1 | Reaction | Reaction | Reaction | | | | |
| 2 | N22 | Reaction | Reaction | Reaction | | | | |
| 3 | N43 | Reaction | Reaction | Reaction | | | | |
| 4 | N64 | Reaction | Reaction | Reaction | | | | |
| 5 | N85 | Reaction | Reaction | Reaction | | | | |
| 6 | N106 | Reaction | Reaction | Reaction | | | | |
| 7 | N127 | Reaction | Reaction | Reaction | | | | |
| 8 | N21 | Reaction | Reaction | Reaction | | | | |
| 9 | N42 | Reaction | Reaction | Reaction | | | | |
| 10 | N63 | Reaction | Reaction | Reaction | | | | |
| 11 | N84 | Reaction | Reaction | Reaction | | | | |
| 12 | N105 | Reaction | Reaction | Reaction | | | | |
| 13 | N126 | Reaction | Reaction | Reaction | | | | |
| 14 | N147 | Reaction | Reaction | Reaction | | | | |

## Member Section Forces (By Combination)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | M1 | 1 | 0 | 1.124 | 0 | -5.217 | 0 | 8.202 |
| 2 | | | 2 | 0 | 1.124 | 0 | -5.217 | 0 | 6.445 |
| 3 | | | 3 | 0 | 1.124 | 0 | -5.217 | 0 | 4.688 |
| 4 | | | 4 | 0 | 1.124 | 0 | -5.217 | 0 | 2.931 |
| 5 | | | 5 | 0 | 1.124 | 0 | -5.217 | 0 | 1.175 |
| 6 | 2 | M2 | 1 | 0 | 1.274 | 0 | -5.219 | 0 | 8.569 |
| 7 | | | 2 | 0 | 1.274 | 0 | -5.219 | 0 | 6.579 |
| 8 | | | 3 | 0 | 1.274 | 0 | -5.219 | 0 | 4.589 |
| 9 | | | 4 | 0 | 1.274 | 0 | -5.219 | 0 | 2.598 |
| 10 | | | 5 | 0 | 1.274 | 0 | -5.219 | 0 | .608 |
| 11 | 2 | M3 | 1 | 0 | 1.723 | 0 | -4.576 | 0 | 7.791 |
| 12 | | | 2 | 0 | 1.723 | 0 | -4.576 | 0 | 5.099 |
| 13 | | | 3 | 0 | 1.723 | 0 | -4.576 | 0 | 2.407 |
| 14 | | | 4 | 0 | 1.723 | 0 | -4.576 | 0 | -.284 |
| 15 | | | 5 | 0 | 1.723 | 0 | -4.576 | 0 | -2.976 |
| 16 | 2 | M4 | 1 | 0 | 1.242 | 0 | -5.263 | 0 | 1.644 |
| 17 | | | 2 | 0 | 1.242 | 0 | -5.263 | 0 | -.297 |
| 18 | | | 3 | 0 | 1.242 | 0 | -5.263 | 0 | -2.238 |
| 19 | | | 4 | 0 | 1.242 | 0 | -5.263 | 0 | -4.179 |
| 20 | | | 5 | 0 | 1.242 | 0 | -5.263 | 0 | -6.12 |
| 21 | 2 | M5 | 1 | 0 | .822 | 0 | -5.508 | 0 | -1.654 |
| 22 | | | 2 | 0 | .822 | 0 | -5.508 | 0 | -2.937 |
| 23 | | | 3 | 0 | .822 | 0 | -5.508 | 0 | -4.221 |
| 24 | | | 4 | 0 | .822 | 0 | -5.508 | 0 | -5.505 |
| 25 | | | 5 | 0 | .822 | 0 | -5.508 | 0 | -6.789 |
| 26 | 2 | M6 | 1 | 0 | .246 | 0 | -5.762 | 0 | -2.507 |
| 27 | | | 2 | 0 | .246 | 0 | -5.762 | 0 | -2.892 |
| 28 | | | 3 | 0 | .246 | 0 | -5.762 | 0 | -3.276 |
| 29 | | | 4 | 0 | .246 | 0 | -5.762 | 0 | -3.661 |
| 30 | | | 5 | 0 | .246 | 0 | -5.762 | 0 | -4.046 |
| 31 | 2 | M7 | 1 | 0 | 3.948 | 0 | -4.944 | 0 | 34.191 |
| 32 | | | 2 | 0 | 3.948 | 0 | -4.944 | 0 | 28.023 |
| 33 | | | 3 | 0 | 3.948 | 0 | -4.944 | 0 | 21.854 |
| 34 | | | 4 | 0 | 3.948 | 0 | -4.944 | 0 | 15.685 |
| 35 | | | 5 | 0 | 3.948 | 0 | -4.944 | 0 | 9.516 |
| 36 | 2 | M8 | 1 | 0 | 5.611 | 0 | -4.943 | 0 | 41.008 |
| 37 | | | 2 | 0 | 5.611 | 0 | -4.943 | 0 | 32.241 |
| 38 | | | 3 | 0 | 5.611 | 0 | -4.943 | 0 | 23.474 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 39 | | | 4 | 0 | 5.611 | 0 | -4.943 | 0 | 14.707 |
| 40 | | | 5 | 0 | 5.611 | 0 | -4.943 | 0 | 5.94 |
| 41 | 2 | M9 | 1 | 0 | 7.863 | 0 | -4.312 | 0 | 36.387 |
| 42 | | | 2 | 0 | 7.863 | 0 | -4.312 | 0 | 24.1 |
| 43 | | | 3 | 0 | 7.863 | 0 | -4.312 | 0 | 11.814 |
| 44 | | | 4 | 0 | 7.863 | 0 | -4.312 | 0 | -.473 |
| 45 | | | 5 | 0 | 7.863 | 0 | -4.312 | 0 | -12.76 |
| 46 | 2 | M10 | 1 | 0 | 5.654 | 0 | -4.966 | 0 | 7.907 |
| 47 | | | 2 | 0 | 5.654 | 0 | -4.966 | 0 | -.927 |
| 48 | | | 3 | 0 | 5.654 | 0 | -4.966 | 0 | -9.761 |
| 49 | | | 4 | 0 | 5.654 | 0 | -4.966 | 0 | -18.595 |
| 50 | | | 5 | 0 | 5.654 | 0 | -4.966 | 0 | -27.429 |
| 51 | 2 | M11 | 1 | 0 | 3.529 | 0 | -5.17 | 0 | -7.604 |
| 52 | | | 2 | 0 | 3.529 | 0 | -5.17 | 0 | -13.118 |
| 53 | | | 3 | 0 | 3.529 | 0 | -5.17 | 0 | -18.632 |
| 54 | | | 4 | 0 | 3.529 | 0 | -5.17 | 0 | -24.146 |
| 55 | | | 5 | 0 | 3.529 | 0 | -5.17 | 0 | -29.66 |
| 56 | 2 | M12 | 1 | 0 | 1.094 | 0 | -5.387 | 0 | -10.818 |
| 57 | | | 2 | 0 | 1.094 | 0 | -5.387 | 0 | -12.527 |
| 58 | | | 3 | 0 | 1.094 | 0 | -5.387 | 0 | -14.237 |
| 59 | | | 4 | 0 | 1.094 | 0 | -5.387 | 0 | -15.946 |
| 60 | | | 5 | 0 | 1.094 | 0 | -5.387 | 0 | -17.656 |
| 61 | 2 | M13 | 1 | 0 | 7.29 | 0 | -4.082 | 0 | 64.754 |
| 62 | | | 2 | 0 | 7.29 | 0 | -4.082 | 0 | 53.363 |
| 63 | | | 3 | 0 | 7.29 | 0 | -4.082 | 0 | 41.973 |
| 64 | | | 4 | 0 | 7.29 | 0 | -4.082 | 0 | 30.583 |
| 65 | | | 5 | 0 | 7.29 | 0 | -4.082 | 0 | 19.193 |
| 66 | 2 | M14 | 1 | 0 | 10.674 | 0 | -4.069 | 0 | 78.466 |
| 67 | | | 2 | 0 | 10.674 | 0 | -4.069 | 0 | 61.788 |
| 68 | | | 3 | 0 | 10.674 | 0 | -4.069 | 0 | 45.11 |
| 69 | | | 4 | 0 | 10.674 | 0 | -4.069 | 0 | 28.431 |
| 70 | | | 5 | 0 | 10.674 | 0 | -4.069 | 0 | 11.753 |
| 71 | 2 | M15 | 1 | 0 | 13.978 | 0 | -3.638 | 0 | 68.784 |
| 72 | | | 2 | 0 | 13.978 | 0 | -3.638 | 0 | 46.943 |
| 73 | | | 3 | 0 | 13.978 | 0 | -3.638 | 0 | 25.102 |
| 74 | | | 4 | 0 | 13.978 | 0 | -3.638 | 0 | 3.261 |
| 75 | | | 5 | 0 | 13.978 | 0 | -3.638 | 0 | -18.58 |
| 76 | 2 | M16 | 1 | 0 | 10.416 | 0 | -4.051 | 0 | 19.686 |
| 77 | | | 2 | 0 | 10.416 | 0 | -4.051 | 0 | 3.412 |
| 78 | | | 3 | 0 | 10.416 | 0 | -4.051 | 0 | -12.863 |
| 79 | | | 4 | 0 | 10.416 | 0 | -4.051 | 0 | -29.137 |
| 80 | | | 5 | 0 | 10.416 | 0 | -4.051 | 0 | -45.411 |
| 81 | 2 | M17 | 1 | 0 | 6.712 | 0 | -4.17 | 0 | -8.848 |
| 82 | | | 2 | 0 | 6.712 | 0 | -4.17 | 0 | -19.336 |
| 83 | | | 3 | 0 | 6.712 | 0 | -4.17 | 0 | -29.824 |
| 84 | | | 4 | 0 | 6.712 | 0 | -4.17 | 0 | -40.312 |
| 85 | | | 5 | 0 | 6.712 | 0 | -4.17 | 0 | -50.801 |
| 86 | 2 | M18 | 1 | 0 | 2.614 | 0 | -4.313 | 0 | -16.123 |
| 87 | | | 2 | 0 | 2.614 | 0 | -4.313 | 0 | -20.208 |
| 88 | | | 3 | 0 | 2.614 | 0 | -4.313 | 0 | -24.292 |
| 89 | | | 4 | 0 | 2.614 | 0 | -4.313 | 0 | -28.377 |
| 90 | | | 5 | 0 | 2.614 | 0 | -4.313 | 0 | -32.462 |
| 91 | 2 | M19 | 1 | 0 | 9.172 | 0 | -2.669 | 0 | 84.107 |
| 92 | | | 2 | 0 | 9.172 | 0 | -2.669 | 0 | 69.776 |
| 93 | | | 3 | 0 | 9.172 | 0 | -2.669 | 0 | 55.445 |
| 94 | | | 4 | 0 | 9.172 | 0 | -2.669 | 0 | 41.115 |
| 95 | | | 5 | 0 | 9.172 | 0 | -2.669 | 0 | 26.784 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 96 | 2 | M20 | 1 | 0 | 13.772 | 0 | -2.663 | 0 | 103.478 |
| 97 | | | 2 | 0 | 13.772 | 0 | -2.663 | 0 | 81.959 |
| 98 | | | 3 | 0 | 13.772 | 0 | -2.663 | 0 | 60.439 |
| 99 | | | 4 | 0 | 13.772 | 0 | -2.663 | 0 | 38.92 |
| 100 | | | 5 | 0 | 13.772 | 0 | -2.663 | 0 | 17.401 |
| 101 | 2 | M21 | 1 | 0 | 17.316 | 0 | -2.404 | 0 | 90.877 |
| 102 | | | 2 | 0 | 17.316 | 0 | -2.404 | 0 | 63.821 |
| 103 | | | 3 | 0 | 17.316 | 0 | -2.404 | 0 | 36.765 |
| 104 | | | 4 | 0 | 17.316 | 0 | -2.404 | 0 | 9.709 |
| 105 | | | 5 | 0 | 17.316 | 0 | -2.404 | 0 | -17.347 |
| 106 | 2 | M22 | 1 | 0 | 13.482 | 0 | -2.633 | 0 | 31.647 |
| 107 | | | 2 | 0 | 13.482 | 0 | -2.633 | 0 | 10.582 |
| 108 | | | 3 | 0 | 13.482 | 0 | -2.633 | 0 | -10.483 |
| 109 | | | 4 | 0 | 13.482 | 0 | -2.633 | 0 | -31.548 |
| 110 | | | 5 | 0 | 13.482 | 0 | -2.633 | 0 | -52.613 |
| 111 | 2 | M23 | 1 | 0 | 8.943 | 0 | -2.685 | 0 | -5.972 |
| 112 | | | 2 | 0 | 8.943 | 0 | -2.685 | 0 | -19.945 |
| 113 | | | 3 | 0 | 8.943 | 0 | -2.685 | 0 | -33.918 |
| 114 | | | 4 | 0 | 8.943 | 0 | -2.685 | 0 | -47.891 |
| 115 | | | 5 | 0 | 8.943 | 0 | -2.685 | 0 | -61.864 |
| 116 | 2 | M24 | 1 | 0 | 3.767 | 0 | -2.759 | 0 | -17.726 |
| 117 | | | 2 | 0 | 3.767 | 0 | -2.759 | 0 | -23.612 |
| 118 | | | 3 | 0 | 3.767 | 0 | -2.759 | 0 | -29.499 |
| 119 | | | 4 | 0 | 3.767 | 0 | -2.759 | 0 | -35.385 |
| 120 | | | 5 | 0 | 3.767 | 0 | -2.759 | 0 | -41.271 |
| 121 | 2 | M25 | 1 | 0 | 10.098 | 0 | -.886 | 0 | 93.744 |
| 122 | | | 2 | 0 | 10.098 | 0 | -.886 | 0 | 77.965 |
| 123 | | | 3 | 0 | 10.098 | 0 | -.886 | 0 | 62.187 |
| 124 | | | 4 | 0 | 10.098 | 0 | -.886 | 0 | 46.408 |
| 125 | | | 5 | 0 | 10.098 | 0 | -.886 | 0 | 30.63 |
| 126 | 2 | M26 | 1 | 0 | 15.206 | 0 | -.885 | 0 | 115.955 |
| 127 | | | 2 | 0 | 15.206 | 0 | -.885 | 0 | 92.196 |
| 128 | | | 3 | 0 | 15.206 | 0 | -.885 | 0 | 68.436 |
| 129 | | | 4 | 0 | 15.206 | 0 | -.885 | 0 | 44.677 |
| 130 | | | 5 | 0 | 15.206 | 0 | -.885 | 0 | 20.917 |
| 131 | 2 | M27 | 1 | 0 | 18.877 | 0 | -.802 | 0 | 102.485 |
| 132 | | | 2 | 0 | 18.877 | 0 | -.802 | 0 | 72.989 |
| 133 | | | 3 | 0 | 18.877 | 0 | -.802 | 0 | 43.493 |
| 134 | | | 4 | 0 | 18.877 | 0 | -.802 | 0 | 13.997 |
| 135 | | | 5 | 0 | 18.877 | 0 | -.802 | 0 | -15.499 |
| 136 | 2 | M28 | 1 | 0 | 14.954 | 0 | -.872 | 0 | 38.749 |
| 137 | | | 2 | 0 | 14.954 | 0 | -.872 | 0 | 15.383 |
| 138 | | | 3 | 0 | 14.954 | 0 | -.872 | 0 | -7.983 |
| 139 | | | 4 | 0 | 14.954 | 0 | -.872 | 0 | -31.348 |
| 140 | | | 5 | 0 | 14.954 | 0 | -.872 | 0 | -54.714 |
| 141 | 2 | M29 | 1 | 0 | 10.117 | 0 | -.885 | 0 | -3.173 |
| 142 | | | 2 | 0 | 10.117 | 0 | -.885 | 0 | -18.982 |
| 143 | | | 3 | 0 | 10.117 | 0 | -.885 | 0 | -34.79 |
| 144 | | | 4 | 0 | 10.117 | 0 | -.885 | 0 | -50.598 |
| 145 | | | 5 | 0 | 10.117 | 0 | -.885 | 0 | -66.407 |
| 146 | 2 | M30 | 1 | 0 | 4.45 | 0 | -.907 | 0 | -17.696 |
| 147 | | | 2 | 0 | 4.45 | 0 | -.907 | 0 | -24.648 |
| 148 | | | 3 | 0 | 4.45 | 0 | -.907 | 0 | -31.601 |
| 149 | | | 4 | 0 | 4.45 | 0 | -.907 | 0 | -38.553 |
| 150 | | | 5 | 0 | 4.45 | 0 | -.907 | 0 | -45.506 |
| 151 | 2 | M31 | 1 | 0 | 10.065 | 0 | 1.02 | 0 | 93.392 |
| 152 | | | 2 | 0 | 10.065 | 0 | 1.02 | 0 | 77.666 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 153 | | | 3 | 0 | 10.065 | 0 | 1.02 | 0 | 61.939 |
| 154 | | | 4 | 0 | 10.065 | 0 | 1.02 | 0 | 46.212 |
| 155 | | | 5 | 0 | 10.065 | 0 | 1.02 | 0 | 30.486 |
| 156 | 2 | M32 | 1 | 0 | 15.156 | 0 | 1.018 | 0 | 115.497 |
| 157 | | | 2 | 0 | 15.156 | 0 | 1.018 | 0 | 91.816 |
| 158 | | | 3 | 0 | 15.156 | 0 | 1.018 | 0 | 68.134 |
| 159 | | | 4 | 0 | 15.156 | 0 | 1.018 | 0 | 44.452 |
| 160 | | | 5 | 0 | 15.156 | 0 | 1.018 | 0 | 20.77 |
| 161 | 2 | M33 | 1 | 0 | 18.822 | 0 | .922 | 0 | 102.045 |
| 162 | | | 2 | 0 | 18.822 | 0 | .922 | 0 | 72.636 |
| 163 | | | 3 | 0 | 18.822 | 0 | .922 | 0 | 43.227 |
| 164 | | | 4 | 0 | 18.822 | 0 | .922 | 0 | 13.818 |
| 165 | | | 5 | 0 | 18.822 | 0 | .922 | 0 | -15.591 |
| 166 | 2 | M34 | 1 | 0 | 14.901 | 0 | 1.003 | 0 | 38.466 |
| 167 | | | 2 | 0 | 14.901 | 0 | 1.003 | 0 | 15.183 |
| 168 | | | 3 | 0 | 14.901 | 0 | 1.003 | 0 | -8.101 |
| 169 | | | 4 | 0 | 14.901 | 0 | 1.003 | 0 | -31.384 |
| 170 | | | 5 | 0 | 14.901 | 0 | 1.003 | 0 | -54.667 |
| 171 | 2 | M35 | 1 | 0 | 10.074 | 0 | 1.019 | 0 | -3.303 |
| 172 | | | 2 | 0 | 10.074 | 0 | 1.019 | 0 | -19.043 |
| 173 | | | 3 | 0 | 10.074 | 0 | 1.019 | 0 | -34.783 |
| 174 | | | 4 | 0 | 10.074 | 0 | 1.019 | 0 | -50.523 |
| 175 | | | 5 | 0 | 10.074 | 0 | 1.019 | 0 | -66.264 |
| 176 | 2 | M36 | 1 | 0 | 4.422 | 0 | 1.044 | 0 | -17.716 |
| 177 | | | 2 | 0 | 4.422 | 0 | 1.044 | 0 | -24.626 |
| 178 | | | 3 | 0 | 4.422 | 0 | 1.044 | 0 | -31.536 |
| 179 | | | 4 | 0 | 4.422 | 0 | 1.044 | 0 | -38.445 |
| 180 | | | 5 | 0 | 4.422 | 0 | 1.044 | 0 | -45.355 |
| 181 | 2 | M37 | 1 | 0 | 9.073 | 0 | 2.784 | 0 | 83.063 |
| 182 | | | 2 | 0 | 9.073 | 0 | 2.784 | 0 | 68.886 |
| 183 | | | 3 | 0 | 9.073 | 0 | 2.784 | 0 | 54.709 |
| 184 | | | 4 | 0 | 9.073 | 0 | 2.784 | 0 | 40.533 |
| 185 | | | 5 | 0 | 9.073 | 0 | 2.784 | 0 | 26.356 |
| 186 | 2 | M38 | 1 | 0 | 13.616 | 0 | 2.778 | 0 | 102.113 |
| 187 | | | 2 | 0 | 13.616 | 0 | 2.778 | 0 | 80.838 |
| 188 | | | 3 | 0 | 13.616 | 0 | 2.778 | 0 | 59.562 |
| 189 | | | 4 | 0 | 13.616 | 0 | 2.778 | 0 | 38.287 |
| 190 | | | 5 | 0 | 13.616 | 0 | 2.778 | 0 | 17.011 |
| 191 | 2 | M39 | 1 | 0 | 17.143 | 0 | 2.506 | 0 | 89.609 |
| 192 | | | 2 | 0 | 17.143 | 0 | 2.506 | 0 | 62.822 |
| 193 | | | 3 | 0 | 17.143 | 0 | 2.506 | 0 | 36.036 |
| 194 | | | 4 | 0 | 17.143 | 0 | 2.506 | 0 | 9.25 |
| 195 | | | 5 | 0 | 17.143 | 0 | 2.506 | 0 | -17.536 |
| 196 | 2 | M40 | 1 | 0 | 13.319 | 0 | 2.746 | 0 | 30.887 |
| 197 | | | 2 | 0 | 13.319 | 0 | 2.746 | 0 | 10.076 |
| 198 | | | 3 | 0 | 13.319 | 0 | 2.746 | 0 | -10.735 |
| 199 | | | 4 | 0 | 13.319 | 0 | 2.746 | 0 | -31.547 |
| 200 | | | 5 | 0 | 13.319 | 0 | 2.746 | 0 | -52.358 |
| 201 | 2 | M41 | 1 | 0 | 8.817 | 0 | 2.802 | 0 | -6.249 |
| 202 | | | 2 | 0 | 8.817 | 0 | 2.802 | 0 | -20.025 |
| 203 | | | 3 | 0 | 8.817 | 0 | 2.802 | 0 | -33.801 |
| 204 | | | 4 | 0 | 8.817 | 0 | 2.802 | 0 | -47.577 |
| 205 | | | 5 | 0 | 8.817 | 0 | 2.802 | 0 | -61.354 |
| 206 | 2 | M42 | 1 | 0 | 3.696 | 0 | 2.881 | 0 | -17.712 |
| 207 | | | 2 | 0 | 3.696 | 0 | 2.881 | 0 | -23.486 |
| 208 | | | 3 | 0 | 3.696 | 0 | 2.881 | 0 | -29.261 |
| 209 | | | 4 | 0 | 3.696 | 0 | 2.881 | 0 | -35.036 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 210 | | | 5 | 0 | 3.696 | 0 | 2.881 | 0 | -40.811 |
| 211 | 2 | M43 | 1 | 0 | 7.136 | 0 | 4.164 | 0 | 63.046 |
| 212 | | | 2 | 0 | 7.136 | 0 | 4.164 | 0 | 51.895 |
| 213 | | | 3 | 0 | 7.136 | 0 | 4.164 | 0 | 40.745 |
| 214 | | | 4 | 0 | 7.136 | 0 | 4.164 | 0 | 29.595 |
| 215 | | | 5 | 0 | 7.136 | 0 | 4.164 | 0 | 18.445 |
| 216 | 2 | M44 | 1 | 0 | 10.392 | 0 | 4.149 | 0 | 76.177 |
| 217 | | | 2 | 0 | 10.392 | 0 | 4.149 | 0 | 59.938 |
| 218 | | | 3 | 0 | 10.392 | 0 | 4.149 | 0 | 43.7 |
| 219 | | | 4 | 0 | 10.392 | 0 | 4.149 | 0 | 27.462 |
| 220 | | | 5 | 0 | 10.392 | 0 | 4.149 | 0 | 11.224 |
| 221 | 2 | M45 | 1 | 0 | 13.662 | 0 | 3.705 | 0 | 66.795 |
| 222 | | | 2 | 0 | 13.662 | 0 | 3.705 | 0 | 45.449 |
| 223 | | | 3 | 0 | 13.662 | 0 | 3.705 | 0 | 24.102 |
| 224 | | | 4 | 0 | 13.662 | 0 | 3.705 | 0 | 2.756 |
| 225 | | | 5 | 0 | 13.662 | 0 | 3.705 | 0 | -18.59 |
| 226 | 2 | M46 | 1 | 0 | 10.129 | 0 | 4.132 | 0 | 18.721 |
| 227 | | | 2 | 0 | 10.129 | 0 | 4.132 | 0 | 2.894 |
| 228 | | | 3 | 0 | 10.129 | 0 | 4.132 | 0 | -12.933 |
| 229 | | | 4 | 0 | 10.129 | 0 | 4.132 | 0 | -28.761 |
| 230 | | | 5 | 0 | 10.129 | 0 | 4.132 | 0 | -44.588 |
| 231 | 2 | M47 | 1 | 0 | 6.521 | 0 | 4.258 | 0 | -8.923 |
| 232 | | | 2 | 0 | 6.521 | 0 | 4.258 | 0 | -19.112 |
| 233 | | | 3 | 0 | 6.521 | 0 | 4.258 | 0 | -29.301 |
| 234 | | | 4 | 0 | 6.521 | 0 | 4.258 | 0 | -39.49 |
| 235 | | | 5 | 0 | 6.521 | 0 | 4.258 | 0 | -49.679 |
| 236 | 2 | M48 | 1 | 0 | 2.532 | 0 | 4.407 | 0 | -15.847 |
| 237 | | | 2 | 0 | 2.532 | 0 | 4.407 | 0 | -19.804 |
| 238 | | | 3 | 0 | 2.532 | 0 | 4.407 | 0 | -23.76 |
| 239 | | | 4 | 0 | 2.532 | 0 | 4.407 | 0 | -27.716 |
| 240 | | | 5 | 0 | 2.532 | 0 | 4.407 | 0 | -31.673 |
| 241 | 2 | M49 | 1 | 0 | 3.632 | 0 | 4.98 | 0 | 31.397 |
| 242 | | | 2 | 0 | 3.632 | 0 | 4.98 | 0 | 25.721 |
| 243 | | | 3 | 0 | 3.632 | 0 | 4.98 | 0 | 20.046 |
| 244 | | | 4 | 0 | 3.632 | 0 | 4.98 | 0 | 14.37 |
| 245 | | | 5 | 0 | 3.632 | 0 | 4.98 | 0 | 8.695 |
| 246 | 2 | M50 | 1 | 0 | 5.144 | 0 | 4.981 | 0 | 37.636 |
| 247 | | | 2 | 0 | 5.144 | 0 | 4.981 | 0 | 29.598 |
| 248 | | | 3 | 0 | 5.144 | 0 | 4.981 | 0 | 21.56 |
| 249 | | | 4 | 0 | 5.144 | 0 | 4.981 | 0 | 13.522 |
| 250 | | | 5 | 0 | 5.144 | 0 | 4.981 | 0 | 5.484 |
| 251 | 2 | M51 | 1 | 0 | 7.264 | 0 | 4.335 | 0 | 33.475 |
| 252 | | | 2 | 0 | 7.264 | 0 | 4.335 | 0 | 22.126 |
| 253 | | | 3 | 0 | 7.264 | 0 | 4.335 | 0 | 10.776 |
| 254 | | | 4 | 0 | 7.264 | 0 | 4.335 | 0 | -.573 |
| 255 | | | 5 | 0 | 7.264 | 0 | 4.335 | 0 | -11.923 |
| 256 | 2 | M52 | 1 | 0 | 5.215 | 0 | 5.008 | 0 | 7.097 |
| 257 | | | 2 | 0 | 5.215 | 0 | 5.008 | 0 | -1.052 |
| 258 | | | 3 | 0 | 5.215 | 0 | 5.008 | 0 | -9.201 |
| 259 | | | 4 | 0 | 5.215 | 0 | 5.008 | 0 | -17.351 |
| 260 | | | 5 | 0 | 5.215 | 0 | 5.008 | 0 | -25.5 |
| 261 | 2 | M53 | 1 | 0 | 3.243 | 0 | 5.217 | 0 | -7.253 |
| 262 | | | 2 | 0 | 3.243 | 0 | 5.217 | 0 | -12.32 |
| 263 | | | 3 | 0 | 3.243 | 0 | 5.217 | 0 | -17.388 |
| 264 | | | 4 | 0 | 3.243 | 0 | 5.217 | 0 | -22.456 |
| 265 | | | 5 | 0 | 3.243 | 0 | 5.217 | 0 | -27.524 |
| 266 | 2 | M54 | 1 | 0 | .973 | 0 | 5.439 | 0 | -10.177 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 267 | | | 2 | 0 | .973 | 0 | 5.439 | 0 | -11.698 |
| 268 | | | 3 | 0 | .973 | 0 | 5.439 | 0 | -13.219 |
| 269 | | | 4 | 0 | .973 | 0 | 5.439 | 0 | -14.74 |
| 270 | | | 5 | 0 | .973 | 0 | 5.439 | 0 | -16.261 |
| 271 | 2 | M55 | 1 | 0 | .968 | 0 | 5.214 | 0 | 7.428 |
| 272 | | | 2 | 0 | .968 | 0 | 5.214 | 0 | 5.916 |
| 273 | | | 3 | 0 | .968 | 0 | 5.214 | 0 | 4.403 |
| 274 | | | 4 | 0 | .968 | 0 | 5.214 | 0 | 2.891 |
| 275 | | | 5 | 0 | .968 | 0 | 5.214 | 0 | 1.378 |
| 276 | 2 | M56 | 1 | 0 | 1.182 | 0 | 5.217 | 0 | 8.062 |
| 277 | | | 2 | 0 | 1.182 | 0 | 5.217 | 0 | 6.215 |
| 278 | | | 3 | 0 | 1.182 | 0 | 5.217 | 0 | 4.368 |
| 279 | | | 4 | 0 | 1.182 | 0 | 5.217 | 0 | 2.521 |
| 280 | | | 5 | 0 | 1.182 | 0 | 5.217 | 0 | .674 |
| 281 | 2 | M57 | 1 | 0 | 1.55 | 0 | 4.589 | 0 | 7.167 |
| 282 | | | 2 | 0 | 1.55 | 0 | 4.589 | 0 | 4.744 |
| 283 | | | 3 | 0 | 1.55 | 0 | 4.589 | 0 | 2.322 |
| 284 | | | 4 | 0 | 1.55 | 0 | 4.589 | 0 | -.1 |
| 285 | | | 5 | 0 | 1.55 | 0 | 4.589 | 0 | -2.522 |
| 286 | 2 | M58 | 1 | 0 | 1.187 | 0 | 5.263 | 0 | 1.627 |
| 287 | | | 2 | 0 | 1.187 | 0 | 5.263 | 0 | -.227 |
| 288 | | | 3 | 0 | 1.187 | 0 | 5.263 | 0 | -2.082 |
| 289 | | | 4 | 0 | 1.187 | 0 | 5.263 | 0 | -3.936 |
| 290 | | | 5 | 0 | 1.187 | 0 | 5.263 | 0 | -5.791 |
| 291 | 2 | M59 | 1 | 0 | .749 | 0 | 5.506 | 0 | -1.78 |
| 292 | | | 2 | 0 | .749 | 0 | 5.506 | 0 | -2.951 |
| 293 | | | 3 | 0 | .749 | 0 | 5.506 | 0 | -4.122 |
| 294 | | | 4 | 0 | .749 | 0 | 5.506 | 0 | -5.292 |
| 295 | | | 5 | 0 | .749 | 0 | 5.506 | 0 | -6.463 |
| 296 | 2 | M60 | 1 | 0 | .164 | 0 | 5.758 | 0 | -2.615 |
| 297 | | | 2 | 0 | .164 | 0 | 5.758 | 0 | -2.872 |
| 298 | | | 3 | 0 | .164 | 0 | 5.758 | 0 | -3.128 |
| 299 | | | 4 | 0 | .164 | 0 | 5.758 | 0 | -3.385 |
| 300 | | | 5 | 0 | .164 | 0 | 5.758 | 0 | -3.641 |
| 301 | 2 | M61 | 1 | 0 | 131.44 | 0 | 0 | 0 | 0 |
| 302 | | | 2 | 0 | 130.36 | 0 | 0 | 0 | -98.175 |
| 303 | | | 3 | 0 | 129.28 | 0 | 0 | 0 | -195.54 |
| 304 | | | 4 | 0 | 128.2 | 0 | 0 | 0 | -292.096 |
| 305 | | | 5 | 0 | 127.12 | 0 | 0 | 0 | -387.841 |
| 306 | 2 | M62 | 1 | 0 | 125.246 | 0 | 5.803 | 0 | -382.65 |
| 307 | | | 2 | 0 | 123.086 | 0 | 5.803 | 0 | -568.898 |
| 308 | | | 3 | 0 | 120.926 | 0 | 5.803 | 0 | -751.906 |
| 309 | | | 4 | 0 | 118.766 | 0 | 5.803 | 0 | -931.674 |
| 310 | | | 5 | 0 | 116.606 | 0 | 5.803 | 0 | -1108.202 |
| 311 | 2 | M63 | 1 | 0 | 116.606 | 0 | -3.416 | 0 | -1108.212 |
| 312 | | | 2 | 0 | 114.446 | 0 | -3.416 | 0 | -1281.501 |
| 313 | | | 3 | 0 | 112.286 | 0 | -3.416 | 0 | -1451.549 |
| 314 | | | 4 | 0 | 110.126 | 0 | -3.416 | 0 | -1618.358 |
| 315 | | | 5 | 0 | 107.966 | 0 | -3.416 | 0 | -1781.926 |
| 316 | 2 | M64 | 1 | 0 | 103.268 | 0 | 14.125 | 0 | -1777.05 |
| 317 | | | 2 | 0 | 100.568 | 0 | 14.125 | 0 | -1968.145 |
| 318 | | | 3 | 0 | 97.868 | 0 | 14.125 | 0 | -2154.178 |
| 319 | | | 4 | 0 | 95.168 | 0 | 14.125 | 0 | -2335.149 |
| 320 | | | 5 | 0 | 92.468 | 0 | 14.125 | 0 | -2511.057 |
| 321 | 2 | M65 | 1 | 0 | 92.468 | 0 | -11.987 | 0 | -2511.068 |
| 322 | | | 2 | 0 | 89.768 | 0 | -11.987 | 0 | -2681.913 |
| 323 | | | 3 | 0 | 87.068 | 0 | -11.987 | 0 | -2847.696 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 324 | | | 4 | 0 | 84.368 | 0 | -11.987 | 0 | -3008.416 |
| 325 | | | 5 | 0 | 81.668 | 0 | -11.987 | 0 | -3164.074 |
| 326 | 2 | M66 | 1 | 0 | 73.628 | 0 | 19.886 | 0 | -3160.033 |
| 327 | | | 2 | 0 | 70.928 | 0 | 19.886 | 0 | -3295.554 |
| 328 | | | 3 | 0 | 68.228 | 0 | 19.886 | 0 | -3426.013 |
| 329 | | | 4 | 0 | 65.528 | 0 | 19.886 | 0 | -3551.409 |
| 330 | | | 5 | 0 | 62.828 | 0 | 19.886 | 0 | -3671.743 |
| 331 | 2 | M67 | 1 | 0 | 62.828 | 0 | -18.295 | 0 | -3671.751 |
| 332 | | | 2 | 0 | 60.128 | 0 | -18.295 | 0 | -3787.022 |
| 333 | | | 3 | 0 | 57.428 | 0 | -18.295 | 0 | -3897.231 |
| 334 | | | 4 | 0 | 54.728 | 0 | -18.295 | 0 | -4002.377 |
| 335 | | | 5 | 0 | 52.028 | 0 | -18.295 | 0 | -4102.461 |
| 336 | 2 | M68 | 1 | 0 | 42.107 | 0 | 23.166 | 0 | -4099.818 |
| 337 | | | 2 | 0 | 39.407 | 0 | 23.166 | 0 | -4176.237 |
| 338 | | | 3 | 0 | 36.707 | 0 | 23.166 | 0 | -4247.593 |
| 339 | | | 4 | 0 | 34.007 | 0 | 23.166 | 0 | -4313.887 |
| 340 | | | 5 | 0 | 31.307 | 0 | 23.166 | 0 | -4375.118 |
| 341 | 2 | M69 | 1 | 0 | 31.307 | 0 | -22.33 | 0 | -4375.122 |
| 342 | | | 2 | 0 | 28.607 | 0 | -22.33 | 0 | -4431.291 |
| 343 | | | 3 | 0 | 25.907 | 0 | -22.33 | 0 | -4482.397 |
| 344 | | | 4 | 0 | 23.207 | 0 | -22.33 | 0 | -4528.441 |
| 345 | | | 5 | 0 | 20.507 | 0 | -22.33 | 0 | -4569.423 |
| 346 | 2 | M70 | 1 | 0 | 9.659 | 0 | 23.904 | 0 | -4568.544 |
| 347 | | | 2 | 0 | 6.959 | 0 | 23.904 | 0 | -4584.123 |
| 348 | | | 3 | 0 | 4.259 | 0 | 23.904 | 0 | -4594.639 |
| 349 | | | 4 | 0 | 1.559 | 0 | 23.904 | 0 | -4600.093 |
| 350 | | | 5 | 0 | -1.141 | 0 | 23.904 | 0 | -4600.484 |
| 351 | 2 | M71 | 1 | 0 | -1.141 | 0 | -23.935 | 0 | -4600.484 |
| 352 | | | 2 | 0 | -3.841 | 0 | -23.935 | 0 | -4595.813 |
| 353 | | | 3 | 0 | -6.541 | 0 | -23.935 | 0 | -4586.08 |
| 354 | | | 4 | 0 | -9.241 | 0 | -23.935 | 0 | -4571.284 |
| 355 | | | 5 | 0 | -11.941 | 0 | -23.935 | 0 | -4551.425 |
| 356 | 2 | M72 | 1 | 0 | -22.756 | 0 | 22.124 | 0 | -4552.436 |
| 357 | | | 2 | 0 | -25.456 | 0 | 22.124 | 0 | -4507.236 |
| 358 | | | 3 | 0 | -28.156 | 0 | 22.124 | 0 | -4456.975 |
| 359 | | | 4 | 0 | -30.856 | 0 | 22.124 | 0 | -4401.651 |
| 360 | | | 5 | 0 | -33.556 | 0 | 22.124 | 0 | -4341.264 |
| 361 | 2 | M73 | 1 | 0 | -33.556 | 0 | -23.02 | 0 | -4341.26 |
| 362 | | | 2 | 0 | -36.256 | 0 | -23.02 | 0 | -4275.811 |
| 363 | | | 3 | 0 | -38.956 | 0 | -23.02 | 0 | -4205.3 |
| 364 | | | 4 | 0 | -41.656 | 0 | -23.02 | 0 | -4129.726 |
| 365 | | | 5 | 0 | -44.356 | 0 | -23.02 | 0 | -4049.09 |
| 366 | 2 | M74 | 1 | 0 | -54.179 | 0 | 17.925 | 0 | -4051.847 |
| 367 | | | 2 | 0 | -56.879 | 0 | 17.925 | 0 | -3947.73 |
| 368 | | | 3 | 0 | -59.579 | 0 | 17.925 | 0 | -3838.55 |
| 369 | | | 4 | 0 | -62.279 | 0 | 17.925 | 0 | -3724.309 |
| 370 | | | 5 | 0 | -64.979 | 0 | 17.925 | 0 | -3605.004 |
| 371 | 2 | M75 | 1 | 0 | -64.979 | 0 | -19.562 | 0 | -3604.996 |
| 372 | | | 2 | 0 | -67.679 | 0 | -19.562 | 0 | -3480.629 |
| 373 | | | 3 | 0 | -70.379 | 0 | -19.562 | 0 | -3351.2 |
| 374 | | | 4 | 0 | -73.079 | 0 | -19.562 | 0 | -3216.709 |
| 375 | | | 5 | 0 | -75.779 | 0 | -19.562 | 0 | -3077.155 |
| 376 | 2 | M76 | 1 | 0 | -83.665 | 0 | 11.464 | 0 | -3081.277 |
| 377 | | | 2 | 0 | -86.365 | 0 | 11.464 | 0 | -2921.874 |
| 378 | | | 3 | 0 | -89.065 | 0 | 11.464 | 0 | -2757.408 |
| 379 | | | 4 | 0 | -91.765 | 0 | 11.464 | 0 | -2587.88 |
| 380 | | | 5 | 0 | -94.465 | 0 | 11.464 | 0 | -2413.29 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 381 | 2 | M77 | 1 | 0 | -94.465 | 0 | -13.631 | 0 | -2413.279 |
| 382 | | | 2 | 0 | -97.165 | 0 | -13.631 | 0 | -2233.626 |
| 383 | | | 3 | 0 | -99.865 | 0 | -13.631 | 0 | -2048.912 |
| 384 | | | 4 | 0 | -102.565 | 0 | -13.631 | 0 | -1859.134 |
| 385 | | | 5 | 0 | -105.265 | 0 | -13.631 | 0 | -1664.295 |
| 386 | 2 | M78 | 1 | 0 | -109.647 | 0 | 2.778 | 0 | -1669.204 |
| 387 | | | 2 | 0 | -111.618 | 0 | 2.778 | 0 | -1517.804 |
| 388 | | | 3 | 0 | -113.589 | 0 | 2.778 | 0 | -1363.708 |
| 389 | | | 4 | 0 | -115.559 | 0 | 2.778 | 0 | -1206.914 |
| 390 | | | 5 | 0 | -117.53 | 0 | 2.778 | 0 | -1047.424 |
| 391 | 2 | M79 | 1 | 0 | -117.53 | 0 | -5.171 | 0 | -1047.415 |
| 392 | | | 2 | 0 | -119.501 | 0 | -5.171 | 0 | -885.229 |
| 393 | | | 3 | 0 | -121.471 | 0 | -5.171 | 0 | -720.346 |
| 394 | | | 4 | 0 | -123.442 | 0 | -5.171 | 0 | -552.766 |
| 395 | | | 5 | 0 | -125.412 | 0 | -5.171 | 0 | -382.489 |
| 396 | 2 | M80 | 1 | 0 | -127.13 | 0 | 0 | 0 | -387.682 |
| 397 | | | 2 | 0 | -128.21 | 0 | 0 | 0 | -291.975 |
| 398 | | | 3 | 0 | -129.289 | 0 | 0 | 0 | -195.459 |
| 399 | | | 4 | 0 | -130.369 | 0 | 0 | 0 | -98.134 |
| 400 | | | 5 | 0 | -131.448 | 0 | 0 | 0 | 0 |
| 401 | 2 | M81 | 1 | 0 | 122.759 | 0 | 0 | 0 | 0 |
| 402 | | | 2 | 0 | 121.632 | 0 | 0 | 0 | -90.853 |
| 403 | | | 3 | 0 | 120.506 | 0 | 0 | 0 | -180.868 |
| 404 | | | 4 | 0 | 119.379 | 0 | 0 | 0 | -270.045 |
| 405 | | | 5 | 0 | 118.253 | 0 | 0 | 0 | -358.385 |
| 406 | 2 | M82 | 1 | 0 | 116.604 | 0 | 5.158 | 0 | -358.407 |
| 407 | | | 2 | 0 | 114.351 | 0 | 5.158 | 0 | -530.121 |
| 408 | | | 3 | 0 | 112.098 | 0 | 5.158 | 0 | -698.486 |
| 409 | | | 4 | 0 | 109.845 | 0 | 5.158 | 0 | -863.5 |
| 410 | | | 5 | 0 | 107.592 | 0 | 5.158 | 0 | -1025.164 |
| 411 | 2 | M83 | 1 | 0 | 107.592 | 0 | -3.37 | 0 | -1025.172 |
| 412 | | | 2 | 0 | 105.34 | 0 | -3.37 | 0 | -1183.486 |
| 413 | | | 3 | 0 | 103.087 | 0 | -3.37 | 0 | -1338.451 |
| 414 | | | 4 | 0 | 100.834 | 0 | -3.37 | 0 | -1490.066 |
| 415 | | | 5 | 0 | 98.581 | 0 | -3.37 | 0 | -1638.331 |
| 416 | 2 | M84 | 1 | 0 | 95.418 | 0 | 12.789 | 0 | -1638.393 |
| 417 | | | 2 | 0 | 92.602 | 0 | 12.789 | 0 | -1813.135 |
| 418 | | | 3 | 0 | 89.786 | 0 | 12.789 | 0 | -1982.642 |
| 419 | | | 4 | 0 | 86.97 | 0 | 12.789 | 0 | -2146.915 |
| 420 | | | 5 | 0 | 84.154 | 0 | 12.789 | 0 | -2305.954 |
| 421 | 2 | M85 | 1 | 0 | 84.154 | 0 | -11.19 | 0 | -2305.962 |
| 422 | | | 2 | 0 | 81.338 | 0 | -11.19 | 0 | -2459.766 |
| 423 | | | 3 | 0 | 78.522 | 0 | -11.19 | 0 | -2608.336 |
| 424 | | | 4 | 0 | 75.706 | 0 | -11.19 | 0 | -2751.672 |
| 425 | | | 5 | 0 | 72.89 | 0 | -11.19 | 0 | -2889.773 |
| 426 | 2 | M86 | 1 | 0 | 68.006 | 0 | 18.033 | 0 | -2889.822 |
| 427 | | | 2 | 0 | 65.19 | 0 | 18.033 | 0 | -3013.611 |
| 428 | | | 3 | 0 | 62.374 | 0 | 18.033 | 0 | -3132.166 |
| 429 | | | 4 | 0 | 59.558 | 0 | 18.033 | 0 | -3245.487 |
| 430 | | | 5 | 0 | 56.742 | 0 | 18.033 | 0 | -3353.573 |
| 431 | 2 | M87 | 1 | 0 | 56.742 | 0 | -16.839 | 0 | -3353.579 |
| 432 | | | 2 | 0 | 53.926 | 0 | -16.839 | 0 | -3456.431 |
| 433 | | | 3 | 0 | 51.11 | 0 | -16.839 | 0 | -3554.049 |
| 434 | | | 4 | 0 | 48.294 | 0 | -16.839 | 0 | -3646.432 |
| 435 | | | 5 | 0 | 45.478 | 0 | -16.839 | 0 | -3733.581 |
| 436 | 2 | M88 | 1 | 0 | 39.377 | 0 | 21.031 | 0 | -3733.608 |
| 437 | | | 2 | 0 | 36.561 | 0 | 21.031 | 0 | -3804.184 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 438 | | | 3 | 0 | 33.745 | 0 | 21.031 | 0 | -3869.525 |
| 439 | | | 4 | 0 | 30.929 | 0 | 21.031 | 0 | -3929.632 |
| 440 | | | 5 | 0 | 28.113 | 0 | 21.031 | 0 | -3984.505 |
| 441 | 2 | M89 | 1 | 0 | 28.113 | 0 | -20.402 | 0 | -3984.508 |
| 442 | | | 2 | 0 | 25.297 | 0 | -20.402 | 0 | -4034.146 |
| 443 | | | 3 | 0 | 22.481 | 0 | -20.402 | 0 | -4078.55 |
| 444 | | | 4 | 0 | 19.665 | 0 | -20.402 | 0 | -4117.72 |
| 445 | | | 5 | 0 | 16.849 | 0 | -20.402 | 0 | -4151.656 |
| 446 | 2 | M90 | 1 | 0 | 10.241 | 0 | 21.752 | 0 | -4151.665 |
| 447 | | | 2 | 0 | 7.425 | 0 | 21.752 | 0 | -4168.084 |
| 448 | | | 3 | 0 | 4.609 | 0 | 21.752 | 0 | -4179.269 |
| 449 | | | 4 | 0 | 1.793 | 0 | 21.752 | 0 | -4185.219 |
| 450 | | | 5 | 0 | -1.023 | 0 | 21.752 | 0 | -4185.936 |
| 451 | 2 | M91 | 1 | 0 | -1.023 | 0 | -21.776 | 0 | -4185.936 |
| 452 | | | 2 | 0 | -3.839 | 0 | -21.776 | 0 | -4181.418 |
| 453 | | | 3 | 0 | -6.655 | 0 | -21.776 | 0 | -4171.666 |
| 454 | | | 4 | 0 | -9.47 | 0 | -21.776 | 0 | -4156.68 |
| 455 | | | 5 | 0 | -12.286 | 0 | -21.776 | 0 | -4136.46 |
| 456 | 2 | M92 | 1 | 0 | -18.878 | 0 | 20.223 | 0 | -4136.45 |
| 457 | | | 2 | 0 | -21.694 | 0 | 20.223 | 0 | -4098.744 |
| 458 | | | 3 | 0 | -24.51 | 0 | 20.223 | 0 | -4055.804 |
| 459 | | | 4 | 0 | -27.326 | 0 | 20.223 | 0 | -4007.63 |
| 460 | | | 5 | 0 | -30.142 | 0 | 20.223 | 0 | -3954.221 |
| 461 | 2 | M93 | 1 | 0 | -30.142 | 0 | -20.896 | 0 | -3954.218 |
| 462 | | | 2 | 0 | -32.958 | 0 | -20.896 | 0 | -3895.575 |
| 463 | | | 3 | 0 | -35.774 | 0 | -20.896 | 0 | -3831.698 |
| 464 | | | 4 | 0 | -38.59 | 0 | -20.896 | 0 | -3762.587 |
| 465 | | | 5 | 0 | -41.406 | 0 | -20.896 | 0 | -3688.242 |
| 466 | 2 | M94 | 1 | 0 | -47.449 | 0 | 16.51 | 0 | -3688.213 |
| 467 | | | 2 | 0 | -50.265 | 0 | 16.51 | 0 | -3597.4 |
| 468 | | | 3 | 0 | -53.081 | 0 | 16.51 | 0 | -3501.353 |
| 469 | | | 4 | 0 | -55.897 | 0 | 16.51 | 0 | -3400.072 |
| 470 | | | 5 | 0 | -58.713 | 0 | 16.51 | 0 | -3293.557 |
| 471 | 2 | M95 | 1 | 0 | -58.713 | 0 | -17.739 | 0 | -3293.55 |
| 472 | | | 2 | 0 | -61.529 | 0 | -17.739 | 0 | -3181.801 |
| 473 | | | 3 | 0 | -64.345 | 0 | -17.739 | 0 | -3064.817 |
| 474 | | | 4 | 0 | -67.161 | 0 | -17.739 | 0 | -2942.6 |
| 475 | | | 5 | 0 | -69.977 | 0 | -17.739 | 0 | -2815.148 |
| 476 | 2 | M96 | 1 | 0 | -74.733 | 0 | 10.72 | 0 | -2815.096 |
| 477 | | | 2 | 0 | -77.549 | 0 | 10.72 | 0 | -2673.569 |
| 478 | | | 3 | 0 | -80.365 | 0 | 10.72 | 0 | -2526.807 |
| 479 | | | 4 | 0 | -83.181 | 0 | 10.72 | 0 | -2374.812 |
| 480 | | | 5 | 0 | -85.997 | 0 | 10.72 | 0 | -2217.581 |
| 481 | 2 | M97 | 1 | 0 | -85.997 | 0 | -12.34 | 0 | -2217.573 |
| 482 | | | 2 | 0 | -88.813 | 0 | -12.34 | 0 | -2055.109 |
| 483 | | | 3 | 0 | -91.629 | 0 | -12.34 | 0 | -1887.411 |
| 484 | | | 4 | 0 | -94.445 | 0 | -12.34 | 0 | -1714.479 |
| 485 | | | 5 | 0 | -97.261 | 0 | -12.34 | 0 | -1536.312 |
| 486 | 2 | M98 | 1 | 0 | -100.273 | 0 | 2.784 | 0 | -1536.25 |
| 487 | | | 2 | 0 | -102.328 | 0 | 2.784 | 0 | -1398.823 |
| 488 | | | 3 | 0 | -104.384 | 0 | 2.784 | 0 | -1258.607 |
| 489 | | | 4 | 0 | -106.439 | 0 | 2.784 | 0 | -1115.602 |
| 490 | | | 5 | 0 | -108.494 | 0 | 2.784 | 0 | -969.81 |
| 491 | 2 | M99 | 1 | 0 | -108.494 | 0 | -4.576 | 0 | -969.803 |
| 492 | | | 2 | 0 | -110.55 | 0 | -4.576 | 0 | -821.222 |
| 493 | | | 3 | 0 | -112.605 | 0 | -4.576 | 0 | -669.854 |
| 494 | | | 4 | 0 | -114.66 | 0 | -4.576 | 0 | -515.696 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 495 | | | 5 | 0 | -116.716 | 0 | -4.576 | 0 | -358.751 |
| 496 | 2 | M100 | 1 | 0 | -118.43 | 0 | 0 | 0 | -358.734 |
| 497 | | | 2 | 0 | -119.556 | 0 | 0 | 0 | -270.306 |
| 498 | | | 3 | 0 | -120.681 | 0 | 0 | 0 | -181.041 |
| 499 | | | 4 | 0 | -121.807 | 0 | 0 | 0 | -90.939 |
| 500 | | | 5 | 0 | -122.933 | 0 | 0 | 0 | 0 |
| 501 | 2 | M101 | 1 | 0 | 120.248 | 0 | 0 | 0 | 0 |
| 502 | | | 2 | 0 | 119.131 | 0 | 0 | 0 | -88.211 |
| 503 | | | 3 | 0 | 118.015 | 0 | 0 | 0 | -175.6 |
| 504 | | | 4 | 0 | 116.898 | 0 | 0 | 0 | -262.165 |
| 505 | | | 5 | 0 | 115.781 | 0 | 0 | 0 | -347.908 |
| 506 | 2 | M102 | 1 | 0 | 113.832 | 0 | 5.01 | 0 | -348.573 |
| 507 | | | 2 | 0 | 111.599 | 0 | 5.01 | 0 | -514.716 |
| 508 | | | 3 | 0 | 109.366 | 0 | 5.01 | 0 | -677.567 |
| 509 | | | 4 | 0 | 107.133 | 0 | 5.01 | 0 | -837.127 |
| 510 | | | 5 | 0 | 104.9 | 0 | 5.01 | 0 | -993.395 |
| 511 | 2 | M103 | 1 | 0 | 104.9 | 0 | -3.255 | 0 | -993.402 |
| 512 | | | 2 | 0 | 102.667 | 0 | -3.255 | 0 | -1146.378 |
| 513 | | | 3 | 0 | 100.434 | 0 | -3.255 | 0 | -1296.064 |
| 514 | | | 4 | 0 | 98.201 | 0 | -3.255 | 0 | -1442.457 |
| 515 | | | 5 | 0 | 95.967 | 0 | -3.255 | 0 | -1585.559 |
| 516 | 2 | M104 | 1 | 0 | 92.215 | 0 | 12.351 | 0 | -1586.248 |
| 517 | | | 2 | 0 | 89.423 | 0 | 12.351 | 0 | -1753.582 |
| 518 | | | 3 | 0 | 86.632 | 0 | 12.351 | 0 | -1915.773 |
| 519 | | | 4 | 0 | 83.841 | 0 | 12.351 | 0 | -2072.821 |
| 520 | | | 5 | 0 | 81.049 | 0 | 12.351 | 0 | -2224.726 |
| 521 | 2 | M105 | 1 | 0 | 81.049 | 0 | -10.783 | 0 | -2224.734 |
| 522 | | | 2 | 0 | 78.258 | 0 | -10.783 | 0 | -2371.495 |
| 523 | | | 3 | 0 | 75.467 | 0 | -10.783 | 0 | -2513.113 |
| 524 | | | 4 | 0 | 72.675 | 0 | -10.783 | 0 | -2649.588 |
| 525 | | | 5 | 0 | 69.884 | 0 | -10.783 | 0 | -2780.92 |
| 526 | 2 | M106 | 1 | 0 | 65.08 | 0 | 17.328 | 0 | -2781.385 |
| 527 | | | 2 | 0 | 62.288 | 0 | 17.328 | 0 | -2898.722 |
| 528 | | | 3 | 0 | 59.497 | 0 | 17.328 | 0 | -3010.917 |
| 529 | | | 4 | 0 | 56.705 | 0 | 17.328 | 0 | -3117.968 |
| 530 | | | 5 | 0 | 53.914 | 0 | 17.328 | 0 | -3219.876 |
| 531 | 2 | M107 | 1 | 0 | 53.914 | 0 | -16.155 | 0 | -3219.882 |
| 532 | | | 2 | 0 | 51.123 | 0 | -16.155 | 0 | -3316.647 |
| 533 | | | 3 | 0 | 48.331 | 0 | -16.155 | 0 | -3408.269 |
| 534 | | | 4 | 0 | 45.54 | 0 | -16.155 | 0 | -3494.748 |
| 535 | | | 5 | 0 | 42.749 | 0 | -16.155 | 0 | -3576.083 |
| 536 | 2 | M108 | 1 | 0 | 37.705 | 0 | 20.134 | 0 | -3576.363 |
| 537 | | | 2 | 0 | 34.914 | 0 | 20.134 | 0 | -3643.263 |
| 538 | | | 3 | 0 | 32.122 | 0 | 20.134 | 0 | -3705.019 |
| 539 | | | 4 | 0 | 29.331 | 0 | 20.134 | 0 | -3761.633 |
| 540 | | | 5 | 0 | 26.539 | 0 | 20.134 | 0 | -3813.103 |
| 541 | 2 | M109 | 1 | 0 | 26.539 | 0 | -19.516 | 0 | -3813.106 |
| 542 | | | 2 | 0 | 23.748 | 0 | -19.516 | 0 | -3859.434 |
| 543 | | | 3 | 0 | 20.957 | 0 | -19.516 | 0 | -3900.618 |
| 544 | | | 4 | 0 | 18.165 | 0 | -19.516 | 0 | -3936.659 |
| 545 | | | 5 | 0 | 15.374 | 0 | -19.516 | 0 | -3967.557 |
| 546 | 2 | M110 | 1 | 0 | 10.203 | 0 | 20.795 | 0 | -3967.647 |
| 547 | | | 2 | 0 | 7.411 | 0 | 20.795 | 0 | -3983.874 |
| 548 | | | 3 | 0 | 4.62 | 0 | 20.795 | 0 | -3994.958 |
| 549 | | | 4 | 0 | 1.829 | 0 | 20.795 | 0 | -4000.898 |
| 550 | | | 5 | 0 | -.963 | 0 | 20.795 | 0 | -4001.696 |
| 551 | 2 | M111 | 1 | 0 | -.963 | 0 | -20.818 | 0 | -4001.696 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 552 | | | 2 | 0 | -3.754 | 0 | -20.818 | 0 | -3997.351 |
| 553 | | | 3 | 0 | -6.546 | 0 | -20.818 | 0 | -3987.862 |
| 554 | | | 4 | 0 | -9.337 | 0 | -20.818 | 0 | -3973.23 |
| 555 | | | 5 | 0 | -12.128 | 0 | -20.818 | 0 | -3953.456 |
| 556 | 2 | M112 | 1 | 0 | -17.294 | 0 | 19.348 | 0 | -3953.352 |
| 557 | | | 2 | 0 | -20.085 | 0 | 19.348 | 0 | -3918.916 |
| 558 | | | 3 | 0 | -22.877 | 0 | 19.348 | 0 | -3879.338 |
| 559 | | | 4 | 0 | -25.668 | 0 | 19.348 | 0 | -3834.616 |
| 560 | | | 5 | 0 | -28.459 | 0 | 19.348 | 0 | -3784.751 |
| 561 | 2 | M113 | 1 | 0 | -28.459 | 0 | -20.009 | 0 | -3784.748 |
| 562 | | | 2 | 0 | -31.251 | 0 | -20.009 | 0 | -3729.74 |
| 563 | | | 3 | 0 | -34.042 | 0 | -20.009 | 0 | -3669.589 |
| 564 | | | 4 | 0 | -36.834 | 0 | -20.009 | 0 | -3604.295 |
| 565 | | | 5 | 0 | -39.625 | 0 | -20.009 | 0 | -3533.858 |
| 566 | 2 | M114 | 1 | 0 | -44.652 | 0 | 15.844 | 0 | -3533.565 |
| 567 | | | 2 | 0 | -47.443 | 0 | 15.844 | 0 | -3448.723 |
| 568 | | | 3 | 0 | -50.235 | 0 | 15.844 | 0 | -3358.738 |
| 569 | | | 4 | 0 | -53.026 | 0 | 15.844 | 0 | -3263.609 |
| 570 | | | 5 | 0 | -55.817 | 0 | 15.844 | 0 | -3163.337 |
| 571 | 2 | M115 | 1 | 0 | -55.817 | 0 | -17.051 | 0 | -3163.331 |
| 572 | | | 2 | 0 | -58.609 | 0 | -17.051 | 0 | -3057.917 |
| 573 | | | 3 | 0 | -61.4 | 0 | -17.051 | 0 | -2947.359 |
| 574 | | | 4 | 0 | -64.191 | 0 | -17.051 | 0 | -2831.658 |
| 575 | | | 5 | 0 | -66.983 | 0 | -17.051 | 0 | -2710.814 |
| 576 | 2 | M116 | 1 | 0 | -71.752 | 0 | 10.335 | 0 | -2710.336 |
| 577 | | | 2 | 0 | -74.543 | 0 | 10.335 | 0 | -2575.562 |
| 578 | | | 3 | 0 | -77.335 | 0 | 10.335 | 0 | -2435.644 |
| 579 | | | 4 | 0 | -80.126 | 0 | 10.335 | 0 | -2290.583 |
| 580 | | | 5 | 0 | -82.918 | 0 | 10.335 | 0 | -2140.379 |
| 581 | 2 | M117 | 1 | 0 | -82.918 | 0 | -11.922 | 0 | -2140.371 |
| 582 | | | 2 | 0 | -85.709 | 0 | -11.922 | 0 | -1985.025 |
| 583 | | | 3 | 0 | -88.5 | 0 | -11.922 | 0 | -1824.535 |
| 584 | | | 4 | 0 | -91.292 | 0 | -11.922 | 0 | -1658.902 |
| 585 | | | 5 | 0 | -94.083 | 0 | -11.922 | 0 | -1488.126 |
| 586 | 2 | M118 | 1 | 0 | -97.703 | 0 | 2.687 | 0 | -1487.419 |
| 587 | | | 2 | 0 | -99.74 | 0 | 2.687 | 0 | -1354.662 |
| 588 | | | 3 | 0 | -101.777 | 0 | 2.687 | 0 | -1219.165 |
| 589 | | | 4 | 0 | -103.814 | 0 | 2.687 | 0 | -1080.928 |
| 590 | | | 5 | 0 | -105.852 | 0 | 2.687 | 0 | -939.952 |
| 591 | 2 | M119 | 1 | 0 | -105.852 | 0 | -4.447 | 0 | -939.945 |
| 592 | | | 2 | 0 | -107.889 | 0 | -4.447 | 0 | -796.229 |
| 593 | | | 3 | 0 | -109.926 | 0 | -4.447 | 0 | -649.773 |
| 594 | | | 4 | 0 | -111.964 | 0 | -4.447 | 0 | -500.578 |
| 595 | | | 5 | 0 | -114.001 | 0 | -4.447 | 0 | -348.642 |
| 596 | 2 | M120 | 1 | 0 | -115.869 | 0 | 0 | 0 | -347.996 |
| 597 | | | 2 | 0 | -116.985 | 0 | 0 | 0 | -262.23 |
| 598 | | | 3 | 0 | -118.101 | 0 | 0 | 0 | -175.642 |
| 599 | | | 4 | 0 | -119.217 | 0 | 0 | 0 | -88.232 |
| 600 | | | 5 | 0 | -120.333 | 0 | 0 | 0 | 0 |
| 601 | 2 | M121 | 1 | 0 | 84.577 | 0 | 0 | 0 | 0 |
| 602 | | | 2 | 0 | 83.558 | 0 | 0 | 0 | -61.412 |
| 603 | | | 3 | 0 | 82.539 | 0 | 0 | 0 | -122.079 |
| 604 | | | 4 | 0 | 81.52 | 0 | 0 | 0 | -182.002 |
| 605 | | | 5 | 0 | 80.501 | 0 | 0 | 0 | -241.181 |
| 606 | 2 | M122 | 1 | 0 | 79.482 | 0 | 3.119 | 0 | -240.508 |
| 607 | | | 2 | 0 | 77.444 | 0 | 3.119 | 0 | -355.142 |
| 608 | | | 3 | 0 | 75.405 | 0 | 3.119 | 0 | -466.798 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 609 | | | 4 | 0 | 73.367 | 0 | 3.119 | 0 | -575.477 |
| 610 | | | 5 | 0 | 71.329 | 0 | 3.119 | 0 | -681.177 |
| 611 | 2 | M123 | 1 | 0 | 71.329 | 0 | -2.548 | 0 | -681.18 |
| 612 | | | 2 | 0 | 69.291 | 0 | -2.548 | 0 | -783.903 |
| 613 | | | 3 | 0 | 67.253 | 0 | -2.548 | 0 | -883.649 |
| 614 | | | 4 | 0 | 65.215 | 0 | -2.548 | 0 | -980.417 |
| 615 | | | 5 | 0 | 63.177 | 0 | -2.548 | 0 | -1074.207 |
| 616 | 2 | M124 | 1 | 0 | 63.887 | 0 | 8.068 | 0 | -1073.59 |
| 617 | | | 2 | 0 | 61.339 | 0 | 8.068 | 0 | -1187.937 |
| 618 | | | 3 | 0 | 58.791 | 0 | 8.068 | 0 | -1297.631 |
| 619 | | | 4 | 0 | 56.244 | 0 | 8.068 | 0 | -1402.673 |
| 620 | | | 5 | 0 | 53.696 | 0 | 8.068 | 0 | -1503.061 |
| 621 | 2 | M125 | 1 | 0 | 53.696 | 0 | -7.562 | 0 | -1503.064 |
| 622 | | | 2 | 0 | 51.149 | 0 | -7.562 | 0 | -1598.8 |
| 623 | | | 3 | 0 | 48.601 | 0 | -7.562 | 0 | -1689.884 |
| 624 | | | 4 | 0 | 46.053 | 0 | -7.562 | 0 | -1776.315 |
| 625 | | | 5 | 0 | 43.506 | 0 | -7.562 | 0 | -1858.093 |
| 626 | 2 | M126 | 1 | 0 | 45.568 | 0 | 11.385 | 0 | -1857.701 |
| 627 | | | 2 | 0 | 43.021 | 0 | 11.385 | 0 | -1938.594 |
| 628 | | | 3 | 0 | 40.473 | 0 | 11.385 | 0 | -2014.834 |
| 629 | | | 4 | 0 | 37.926 | 0 | 11.385 | 0 | -2086.422 |
| 630 | | | 5 | 0 | 35.378 | 0 | 11.385 | 0 | -2153.357 |
| 631 | 2 | M127 | 1 | 0 | 35.378 | 0 | -11.007 | 0 | -2153.359 |
| 632 | | | 2 | 0 | 32.83 | 0 | -11.007 | 0 | -2215.642 |
| 633 | | | 3 | 0 | 30.283 | 0 | -11.007 | 0 | -2273.272 |
| 634 | | | 4 | 0 | 27.735 | 0 | -11.007 | 0 | -2326.249 |
| 635 | | | 5 | 0 | 25.188 | 0 | -11.007 | 0 | -2374.574 |
| 636 | 2 | M128 | 1 | 0 | 27.522 | 0 | 13.296 | 0 | -2374.358 |
| 637 | | | 2 | 0 | 24.974 | 0 | 13.296 | 0 | -2422.293 |
| 638 | | | 3 | 0 | 22.427 | 0 | 13.296 | 0 | -2465.576 |
| 639 | | | 4 | 0 | 19.879 | 0 | 13.296 | 0 | -2504.207 |
| 640 | | | 5 | 0 | 17.331 | 0 | 13.296 | 0 | -2538.185 |
| 641 | 2 | M129 | 1 | 0 | 17.331 | 0 | -13.098 | 0 | -2538.186 |
| 642 | | | 2 | 0 | 14.784 | 0 | -13.098 | 0 | -2567.511 |
| 643 | | | 3 | 0 | 12.236 | 0 | -13.098 | 0 | -2592.183 |
| 644 | | | 4 | 0 | 9.689 | 0 | -13.098 | 0 | -2612.204 |
| 645 | | | 5 | 0 | 7.141 | 0 | -13.098 | 0 | -2627.571 |
| 646 | 2 | M130 | 1 | 0 | 9.564 | 0 | 13.827 | 0 | -2627.505 |
| 647 | | | 2 | 0 | 7.017 | 0 | 13.827 | 0 | -2642.645 |
| 648 | | | 3 | 0 | 4.469 | 0 | 13.827 | 0 | -2653.133 |
| 649 | | | 4 | 0 | 1.922 | 0 | 13.827 | 0 | -2658.969 |
| 650 | | | 5 | 0 | -.626 | 0 | 13.827 | 0 | -2660.152 |
| 651 | 2 | M131 | 1 | 0 | -.626 | 0 | -13.835 | 0 | -2660.152 |
| 652 | | | 2 | 0 | -3.174 | 0 | -13.835 | 0 | -2656.682 |
| 653 | | | 3 | 0 | -5.721 | 0 | -13.835 | 0 | -2648.56 |
| 654 | | | 4 | 0 | -8.269 | 0 | -13.835 | 0 | -2635.785 |
| 655 | | | 5 | 0 | -10.817 | 0 | -13.835 | 0 | -2618.358 |
| 656 | 2 | M132 | 1 | 0 | -8.396 | 0 | 12.995 | 0 | -2618.434 |
| 657 | | | 2 | 0 | -10.944 | 0 | 12.995 | 0 | -2600.774 |
| 658 | | | 3 | 0 | -13.491 | 0 | 12.995 | 0 | -2578.462 |
| 659 | | | 4 | 0 | -16.039 | 0 | 12.995 | 0 | -2551.497 |
| 660 | | | 5 | 0 | -18.587 | 0 | 12.995 | 0 | -2519.88 |
| 661 | 2 | M133 | 1 | 0 | -18.587 | 0 | -13.208 | 0 | -2519.879 |
| 662 | | | 2 | 0 | -21.134 | 0 | -13.208 | 0 | -2483.609 |
| 663 | | | 3 | 0 | -23.682 | 0 | -13.208 | 0 | -2442.687 |
| 664 | | | 4 | 0 | -26.229 | 0 | -13.208 | 0 | -2397.112 |
| 665 | | | 5 | 0 | -28.777 | 0 | -13.208 | 0 | -2346.884 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 666 | 2 | M134 | 1 | 0 | -26.453 | 0 | 10.811 | 0 | -2347.111 |
| 667 | | | 2 | 0 | -29.001 | 0 | 10.811 | 0 | -2296.475 |
| 668 | | | 3 | 0 | -31.548 | 0 | 10.811 | 0 | -2241.186 |
| 669 | | | 4 | 0 | -34.096 | 0 | 10.811 | 0 | -2181.245 |
| 670 | | | 5 | 0 | -36.644 | 0 | 10.811 | 0 | -2116.651 |
| 671 | 2 | M135 | 1 | 0 | -36.644 | 0 | -11.2 | 0 | -2116.649 |
| 672 | | | 2 | 0 | -39.191 | 0 | -11.2 | 0 | -2047.402 |
| 673 | | | 3 | 0 | -41.739 | 0 | -11.2 | 0 | -1973.503 |
| 674 | | | 4 | 0 | -44.286 | 0 | -11.2 | 0 | -1894.952 |
| 675 | | | 5 | 0 | -46.834 | 0 | -11.2 | 0 | -1811.748 |
| 676 | 2 | M136 | 1 | 0 | -44.802 | 0 | 7.27 | 0 | -1812.154 |
| 677 | | | 2 | 0 | -47.349 | 0 | 7.27 | 0 | -1728.008 |
| 678 | | | 3 | 0 | -49.897 | 0 | 7.27 | 0 | -1639.21 |
| 679 | | | 4 | 0 | -52.445 | 0 | 7.27 | 0 | -1545.76 |
| 680 | | | 5 | 0 | -54.992 | 0 | 7.27 | 0 | -1447.657 |
| 681 | 2 | M137 | 1 | 0 | -54.992 | 0 | -7.784 | 0 | -1447.654 |
| 682 | | | 2 | 0 | -57.54 | 0 | -7.784 | 0 | -1344.898 |
| 683 | | | 3 | 0 | -60.087 | 0 | -7.784 | 0 | -1237.49 |
| 684 | | | 4 | 0 | -62.635 | 0 | -7.784 | 0 | -1125.43 |
| 685 | | | 5 | 0 | -65.183 | 0 | -7.784 | 0 | -1008.717 |
| 686 | 2 | M138 | 1 | 0 | -64.634 | 0 | 2.161 | 0 | -1009.35 |
| 687 | | | 2 | 0 | -66.494 | 0 | 2.161 | 0 | -921.959 |
| 688 | | | 3 | 0 | -68.353 | 0 | 2.161 | 0 | -832.09 |
| 689 | | | 4 | 0 | -70.213 | 0 | 2.161 | 0 | -739.742 |
| 690 | | | 5 | 0 | -72.072 | 0 | 2.161 | 0 | -644.915 |
| 691 | 2 | M139 | 1 | 0 | -72.072 | 0 | -2.733 | 0 | -644.913 |
| 692 | | | 2 | 0 | -73.931 | 0 | -2.733 | 0 | -547.608 |
| 693 | | | 3 | 0 | -75.791 | 0 | -2.733 | 0 | -447.825 |
| 694 | | | 4 | 0 | -77.65 | 0 | -2.733 | 0 | -345.564 |
| 695 | | | 5 | 0 | -79.51 | 0 | -2.733 | 0 | -240.824 |
| 696 | 2 | M140 | 1 | 0 | -80.646 | 0 | 0 | 0 | -241.486 |
| 697 | | | 2 | 0 | -81.665 | 0 | 0 | 0 | -182.23 |
| 698 | | | 3 | 0 | -82.684 | 0 | 0 | 0 | -122.231 |
| 699 | | | 4 | 0 | -83.702 | 0 | 0 | 0 | -61.487 |
| 700 | | | 5 | 0 | -84.721 | 0 | 0 | 0 | 0 |
| 701 | 2 | M141 | 1 | 0 | 82.189 | 0 | 0 | 0 | 0 |
| 702 | | | 2 | 0 | 81.179 | 0 | 0 | 0 | -59.14 |
| 703 | | | 3 | 0 | 80.169 | 0 | 0 | 0 | -117.548 |
| 704 | | | 4 | 0 | 79.159 | 0 | 0 | 0 | -175.225 |
| 705 | | | 5 | 0 | 78.149 | 0 | 0 | 0 | -232.171 |
| 706 | 2 | M142 | 1 | 0 | 77.07 | 0 | 3.019 | 0 | -231.94 |
| 707 | | | 2 | 0 | 75.05 | 0 | 3.019 | 0 | -342.075 |
| 708 | | | 3 | 0 | 73.03 | 0 | 3.019 | 0 | -449.284 |
| 709 | | | 4 | 0 | 71.01 | 0 | 3.019 | 0 | -553.569 |
| 710 | | | 5 | 0 | 68.99 | 0 | 3.019 | 0 | -654.929 |
| 711 | 2 | M143 | 1 | 0 | 68.99 | 0 | -2.43 | 0 | -654.931 |
| 712 | | | 2 | 0 | 66.97 | 0 | -2.43 | 0 | -753.366 |
| 713 | | | 3 | 0 | 64.95 | 0 | -2.43 | 0 | -848.876 |
| 714 | | | 4 | 0 | 62.93 | 0 | -2.43 | 0 | -941.462 |
| 715 | | | 5 | 0 | 60.91 | 0 | -2.43 | 0 | -1031.122 |
| 716 | 2 | M144 | 1 | 0 | 61.535 | 0 | 7.746 | 0 | -1030.953 |
| 717 | | | 2 | 0 | 59.01 | 0 | 7.746 | 0 | -1140.046 |
| 718 | | | 3 | 0 | 56.485 | 0 | 7.746 | 0 | -1244.569 |
| 719 | | | 4 | 0 | 53.96 | 0 | 7.746 | 0 | -1344.522 |
| 720 | | | 5 | 0 | 51.435 | 0 | 7.746 | 0 | -1439.904 |
| 721 | 2 | M145 | 1 | 0 | 51.435 | 0 | -7.227 | 0 | -1439.907 |
| 722 | | | 2 | 0 | 48.91 | 0 | -7.227 | 0 | -1530.719 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 723 | | | 3 | 0 | 46.385 | 0 | -7.227 | 0 | -1616.961 |
| 724 | | | 4 | 0 | 43.86 | 0 | -7.227 | 0 | -1698.633 |
| 725 | | | 5 | 0 | 41.335 | 0 | -7.227 | 0 | -1775.735 |
| 726 | 2 | M146 | 1 | 0 | 43.538 | 0 | 10.872 | 0 | -1775.634 |
| 727 | | | 2 | 0 | 41.013 | 0 | 10.872 | 0 | -1852.153 |
| 728 | | | 3 | 0 | 38.488 | 0 | 10.872 | 0 | -1924.102 |
| 729 | | | 4 | 0 | 35.963 | 0 | 10.872 | 0 | -1991.481 |
| 730 | | | 5 | 0 | 33.438 | 0 | 10.872 | 0 | -2054.29 |
| 731 | 2 | M147 | 1 | 0 | 33.438 | 0 | -10.49 | 0 | -2054.292 |
| 732 | | | 2 | 0 | 30.914 | 0 | -10.49 | 0 | -2112.531 |
| 733 | | | 3 | 0 | 28.389 | 0 | -10.49 | 0 | -2166.199 |
| 734 | | | 4 | 0 | 25.864 | 0 | -10.49 | 0 | -2215.297 |
| 735 | | | 5 | 0 | 23.339 | 0 | -10.49 | 0 | -2259.825 |
| 736 | 2 | M148 | 1 | 0 | 26.378 | 0 | 12.652 | 0 | -2259.784 |
| 737 | | | 2 | 0 | 23.853 | 0 | 12.652 | 0 | -2305.242 |
| 738 | | | 3 | 0 | 21.328 | 0 | 12.652 | 0 | -2346.131 |
| 739 | | | 4 | 0 | 18.803 | 0 | 12.652 | 0 | -2382.449 |
| 740 | | | 5 | 0 | 16.278 | 0 | 12.652 | 0 | -2414.196 |
| 741 | 2 | M149 | 1 | 0 | 16.278 | 0 | -12.452 | 0 | -2414.197 |
| 742 | | | 2 | 0 | 13.753 | 0 | -12.452 | 0 | -2441.375 |
| 743 | | | 3 | 0 | 11.228 | 0 | -12.452 | 0 | -2463.982 |
| 744 | | | 4 | 0 | 8.703 | 0 | -12.452 | 0 | -2482.02 |
| 745 | | | 5 | 0 | 6.178 | 0 | -12.452 | 0 | -2495.487 |
| 746 | 2 | M150 | 1 | 0 | 9.514 | 0 | 13.139 | 0 | -2495.477 |
| 747 | | | 2 | 0 | 6.99 | 0 | 13.139 | 0 | -2510.413 |
| 748 | | | 3 | 0 | 4.465 | 0 | 13.139 | 0 | -2520.779 |
| 749 | | | 4 | 0 | 1.94 | 0 | 13.139 | 0 | -2526.575 |
| 750 | | | 5 | 0 | -.585 | 0 | 13.139 | 0 | -2527.801 |
| 751 | 2 | M151 | 1 | 0 | -.585 | 0 | -13.147 | 0 | -2527.801 |
| 752 | | | 2 | 0 | -3.11 | 0 | -13.147 | 0 | -2524.456 |
| 753 | | | 3 | 0 | -5.635 | 0 | -13.147 | 0 | -2516.541 |
| 754 | | | 4 | 0 | -8.16 | 0 | -13.147 | 0 | -2504.057 |
| 755 | | | 5 | 0 | -10.685 | 0 | -13.147 | 0 | -2487.002 |
| 756 | 2 | M152 | 1 | 0 | -7.357 | 0 | 12.357 | 0 | -2487.013 |
| 757 | | | 2 | 0 | -9.882 | 0 | 12.357 | 0 | -2471.411 |
| 758 | | | 3 | 0 | -12.407 | 0 | 12.357 | 0 | -2451.239 |
| 759 | | | 4 | 0 | -14.932 | 0 | 12.357 | 0 | -2426.496 |
| 760 | | | 5 | 0 | -17.457 | 0 | 12.357 | 0 | -2397.184 |
| 761 | 2 | M153 | 1 | 0 | -17.457 | 0 | -12.571 | 0 | -2397.183 |
| 762 | | | 2 | 0 | -19.982 | 0 | -12.571 | 0 | -2363.3 |
| 763 | | | 3 | 0 | -22.507 | 0 | -12.571 | 0 | -2324.847 |
| 764 | | | 4 | 0 | -25.032 | 0 | -12.571 | 0 | -2281.824 |
| 765 | | | 5 | 0 | -27.557 | 0 | -12.571 | 0 | -2234.231 |
| 766 | 2 | M154 | 1 | 0 | -24.554 | 0 | 10.305 | 0 | -2234.275 |
| 767 | | | 2 | 0 | -27.079 | 0 | 10.305 | 0 | -2187.546 |
| 768 | | | 3 | 0 | -29.604 | 0 | 10.305 | 0 | -2136.248 |
| 769 | | | 4 | 0 | -32.129 | 0 | 10.305 | 0 | -2080.379 |
| 770 | | | 5 | 0 | -34.654 | 0 | 10.305 | 0 | -2019.94 |
| 771 | 2 | M155 | 1 | 0 | -34.654 | 0 | -10.699 | 0 | -2019.938 |
| 772 | | | 2 | 0 | -37.179 | 0 | -10.699 | 0 | -1954.928 |
| 773 | | | 3 | 0 | -39.704 | 0 | -10.699 | 0 | -1885.349 |
| 774 | | | 4 | 0 | -42.229 | 0 | -10.699 | 0 | -1811.2 |
| 775 | | | 5 | 0 | -44.754 | 0 | -10.699 | 0 | -1732.48 |
| 776 | 2 | M156 | 1 | 0 | -42.646 | 0 | 6.95 | 0 | -1732.587 |
| 777 | | | 2 | 0 | -45.171 | 0 | 6.95 | 0 | -1653.113 |
| 778 | | | 3 | 0 | -47.696 | 0 | 6.95 | 0 | -1569.069 |
| 779 | | | 4 | 0 | -50.22 | 0 | 6.95 | 0 | -1480.455 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 780 | | | 5 | 0 | -52.745 | 0 | 6.95 | 0 | -1387.271 |
| 781 | 2 | M157 | 1 | 0 | -52.745 | 0 | -7.476 | 0 | -1387.268 |
| 782 | | | 2 | 0 | -55.27 | 0 | -7.476 | 0 | -1289.514 |
| 783 | | | 3 | 0 | -57.795 | 0 | -7.476 | 0 | -1187.19 |
| 784 | | | 4 | 0 | -60.32 | 0 | -7.476 | 0 | -1080.295 |
| 785 | | | 5 | 0 | -62.845 | 0 | -7.476 | 0 | -968.83 |
| 786 | 2 | M158 | 1 | 0 | -62.373 | 0 | 2.057 | 0 | -969.003 |
| 787 | | | 2 | 0 | -64.216 | 0 | 2.057 | 0 | -885.387 |
| 788 | | | 3 | 0 | -66.059 | 0 | 2.057 | 0 | -799.337 |
| 789 | | | 4 | 0 | -67.902 | 0 | 2.057 | 0 | -710.853 |
| 790 | | | 5 | 0 | -69.745 | 0 | 2.057 | 0 | -619.933 |
| 791 | 2 | M159 | 1 | 0 | -69.745 | 0 | -2.648 | 0 | -619.931 |
| 792 | | | 2 | 0 | -71.588 | 0 | -2.648 | 0 | -526.578 |
| 793 | | | 3 | 0 | -73.43 | 0 | -2.648 | 0 | -430.79 |
| 794 | | | 4 | 0 | -75.273 | 0 | -2.648 | 0 | -332.567 |
| 795 | | | 5 | 0 | -77.116 | 0 | -2.648 | 0 | -231.91 |
| 796 | 2 | M160 | 1 | 0 | -78.178 | 0 | 0 | 0 | -232.142 |
| 797 | | | 2 | 0 | -79.188 | 0 | 0 | 0 | -175.202 |
| 798 | | | 3 | 0 | -80.197 | 0 | 0 | 0 | -117.532 |
| 799 | | | 4 | 0 | -81.207 | 0 | 0 | 0 | -59.131 |
| 800 | | | 5 | 0 | -82.216 | 0 | 0 | 0 | 0 |
| 801 | 2 | M161 | 1 | 0 | 79.083 | 0 | 0 | 0 | 0 |
| 802 | | | 2 | 0 | 78.082 | 0 | 0 | 0 | -56.383 |
| 803 | | | 3 | 0 | 77.081 | 0 | 0 | 0 | -112.048 |
| 804 | | | 4 | 0 | 76.08 | 0 | 0 | 0 | -166.994 |
| 805 | | | 5 | 0 | 75.079 | 0 | 0 | 0 | -221.223 |
| 806 | 2 | M162 | 1 | 0 | 74.154 | 0 | 2.902 | 0 | -220.982 |
| 807 | | | 2 | 0 | 72.152 | 0 | 2.902 | 0 | -325.957 |
| 808 | | | 3 | 0 | 70.151 | 0 | 2.902 | 0 | -428.06 |
| 809 | | | 4 | 0 | 68.149 | 0 | 2.902 | 0 | -527.29 |
| 810 | | | 5 | 0 | 66.147 | 0 | 2.902 | 0 | -623.647 |
| 811 | 2 | M163 | 1 | 0 | 66.147 | 0 | -2.286 | 0 | -623.65 |
| 812 | | | 2 | 0 | 64.145 | 0 | -2.286 | 0 | -717.134 |
| 813 | | | 3 | 0 | 62.143 | 0 | -2.286 | 0 | -807.747 |
| 814 | | | 4 | 0 | 60.141 | 0 | -2.286 | 0 | -895.486 |
| 815 | | | 5 | 0 | 58.14 | 0 | -2.286 | 0 | -980.353 |
| 816 | 2 | M164 | 1 | 0 | 59.074 | 0 | 7.383 | 0 | -980.17 |
| 817 | | | 2 | 0 | 56.572 | 0 | 7.383 | 0 | -1083.891 |
| 818 | | | 3 | 0 | 54.07 | 0 | 7.383 | 0 | -1183.123 |
| 819 | | | 4 | 0 | 51.568 | 0 | 7.383 | 0 | -1277.867 |
| 820 | | | 5 | 0 | 49.065 | 0 | 7.383 | 0 | -1368.122 |
| 821 | 2 | M165 | 1 | 0 | 49.065 | 0 | -6.844 | 0 | -1368.125 |
| 822 | | | 2 | 0 | 46.563 | 0 | -6.844 | 0 | -1453.892 |
| 823 | | | 3 | 0 | 44.061 | 0 | -6.844 | 0 | -1535.17 |
| 824 | | | 4 | 0 | 41.558 | 0 | -6.844 | 0 | -1611.96 |
| 825 | | | 5 | 0 | 39.056 | 0 | -6.844 | 0 | -1684.261 |
| 826 | 2 | M166 | 1 | 0 | 41.655 | 0 | 10.32 | 0 | -1684.137 |
| 827 | | | 2 | 0 | 39.152 | 0 | 10.32 | 0 | -1756.61 |
| 828 | | | 3 | 0 | 36.65 | 0 | 10.32 | 0 | -1824.595 |
| 829 | | | 4 | 0 | 34.148 | 0 | 10.32 | 0 | -1888.092 |
| 830 | | | 5 | 0 | 31.645 | 0 | 10.32 | 0 | -1947.1 |
| 831 | 2 | M167 | 1 | 0 | 31.645 | 0 | -9.927 | 0 | -1947.102 |
| 832 | | | 2 | 0 | 29.143 | 0 | -9.927 | 0 | -2001.622 |
| 833 | | | 3 | 0 | 26.641 | 0 | -9.927 | 0 | -2051.653 |
| 834 | | | 4 | 0 | 24.139 | 0 | -9.927 | 0 | -2097.196 |
| 835 | | | 5 | 0 | 21.636 | 0 | -9.927 | 0 | -2138.25 |
| 836 | 2 | M168 | 1 | 0 | 25.312 | 0 | 11.977 | 0 | -2138.186 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 837 | | | 2 | 0 | 22.809 | 0 | 11.977 | 0 | -2181.345 |
| 838 | | | 3 | 0 | 20.307 | 0 | 11.977 | 0 | -2220.015 |
| 839 | | | 4 | 0 | 17.805 | 0 | 11.977 | 0 | -2254.197 |
| 840 | | | 5 | 0 | 15.303 | 0 | 11.977 | 0 | -2283.89 |
| 841 | 2 | M169 | 1 | 0 | 15.303 | 0 | -11.773 | 0 | -2283.891 |
| 842 | | | 2 | 0 | 12.8 | 0 | -11.773 | 0 | -2309.096 |
| 843 | | | 3 | 0 | 10.298 | 0 | -11.773 | 0 | -2329.812 |
| 844 | | | 4 | 0 | 7.796 | 0 | -11.773 | 0 | -2346.04 |
| 845 | | | 5 | 0 | 5.293 | 0 | -11.773 | 0 | -2357.779 |
| 846 | 2 | M170 | 1 | 0 | 9.461 | 0 | 12.421 | 0 | -2357.76 |
| 847 | | | 2 | 0 | 6.959 | 0 | 12.421 | 0 | -2372.487 |
| 848 | | | 3 | 0 | 4.457 | 0 | 12.421 | 0 | -2382.726 |
| 849 | | | 4 | 0 | 1.954 | 0 | 12.421 | 0 | -2388.476 |
| 850 | | | 5 | 0 | -.548 | 0 | 12.421 | 0 | -2389.737 |
| 851 | 2 | M171 | 1 | 0 | -.548 | 0 | -12.429 | 0 | -2389.737 |
| 852 | | | 2 | 0 | -3.05 | 0 | -12.429 | 0 | -2386.51 |
| 853 | | | 3 | 0 | -5.552 | 0 | -12.429 | 0 | -2378.794 |
| 854 | | | 4 | 0 | -8.055 | 0 | -12.429 | 0 | -2366.59 |
| 855 | | | 5 | 0 | -10.557 | 0 | -12.429 | 0 | -2349.898 |
| 856 | 2 | M172 | 1 | 0 | -6.406 | 0 | 11.683 | 0 | -2349.919 |
| 857 | | | 2 | 0 | -8.908 | 0 | 11.683 | 0 | -2336.185 |
| 858 | | | 3 | 0 | -11.41 | 0 | 11.683 | 0 | -2317.962 |
| 859 | | | 4 | 0 | -13.912 | 0 | 11.683 | 0 | -2295.251 |
| 860 | | | 5 | 0 | -16.415 | 0 | 11.683 | 0 | -2268.051 |
| 861 | 2 | M173 | 1 | 0 | -16.415 | 0 | -11.902 | 0 | -2268.05 |
| 862 | | | 2 | 0 | -18.917 | 0 | -11.902 | 0 | -2236.362 |
| 863 | | | 3 | 0 | -21.419 | 0 | -11.902 | 0 | -2200.185 |
| 864 | | | 4 | 0 | -23.922 | 0 | -11.902 | 0 | -2159.52 |
| 865 | | | 5 | 0 | -26.424 | 0 | -11.902 | 0 | -2114.367 |
| 866 | 2 | M174 | 1 | 0 | -22.803 | 0 | 9.754 | 0 | -2114.435 |
| 867 | | | 2 | 0 | -25.305 | 0 | 9.754 | 0 | -2071.287 |
| 868 | | | 3 | 0 | -27.808 | 0 | 9.754 | 0 | -2023.651 |
| 869 | | | 4 | 0 | -30.31 | 0 | 9.754 | 0 | -1971.527 |
| 870 | | | 5 | 0 | -32.812 | 0 | 9.754 | 0 | -1914.914 |
| 871 | 2 | M175 | 1 | 0 | -32.812 | 0 | -10.159 | 0 | -1914.912 |
| 872 | | | 2 | 0 | -35.315 | 0 | -10.159 | 0 | -1853.811 |
| 873 | | | 3 | 0 | -37.817 | 0 | -10.159 | 0 | -1788.221 |
| 874 | | | 4 | 0 | -40.319 | 0 | -10.159 | 0 | -1718.143 |
| 875 | | | 5 | 0 | -42.821 | 0 | -10.159 | 0 | -1643.576 |
| 876 | 2 | M176 | 1 | 0 | -40.332 | 0 | 6.582 | 0 | -1643.706 |
| 877 | | | 2 | 0 | -42.835 | 0 | 6.582 | 0 | -1569.116 |
| 878 | | | 3 | 0 | -45.337 | 0 | 6.582 | 0 | -1490.036 |
| 879 | | | 4 | 0 | -47.839 | 0 | 6.582 | 0 | -1406.469 |
| 880 | | | 5 | 0 | -50.342 | 0 | 6.582 | 0 | -1318.412 |
| 881 | 2 | M177 | 1 | 0 | -50.342 | 0 | -7.128 | 0 | -1318.41 |
| 882 | | | 2 | 0 | -52.844 | 0 | -7.128 | 0 | -1225.865 |
| 883 | | | 3 | 0 | -55.346 | 0 | -7.128 | 0 | -1128.832 |
| 884 | | | 4 | 0 | -57.848 | 0 | -7.128 | 0 | -1027.311 |
| 885 | | | 5 | 0 | -60.351 | 0 | -7.128 | 0 | -921.301 |
| 886 | 2 | M178 | 1 | 0 | -59.581 | 0 | 1.931 | 0 | -921.487 |
| 887 | | | 2 | 0 | -61.407 | 0 | 1.931 | 0 | -842.289 |
| 888 | | | 3 | 0 | -63.233 | 0 | 1.931 | 0 | -760.699 |
| 889 | | | 4 | 0 | -65.06 | 0 | 1.931 | 0 | -676.719 |
| 890 | | | 5 | 0 | -66.886 | 0 | 1.931 | 0 | -590.348 |
| 891 | 2 | M179 | 1 | 0 | -66.886 | 0 | -2.549 | 0 | -590.346 |
| 892 | | | 2 | 0 | -68.712 | 0 | -2.549 | 0 | -501.583 |
| 893 | | | 3 | 0 | -70.539 | 0 | -2.549 | 0 | -410.43 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 894 | | | 4 | 0 | -72.365 | 0 | -2.549 | 0 | -316.886 |
| 895 | | | 5 | 0 | -74.191 | 0 | -2.549 | 0 | -220.951 |
| 896 | 2 | M180 | 1 | 0 | -75.106 | 0 | 0 | 0 | -221.192 |
| 897 | | | 2 | 0 | -76.107 | 0 | 0 | 0 | -166.97 |
| 898 | | | 3 | 0 | -77.107 | 0 | 0 | 0 | -112.031 |
| 899 | | | 4 | 0 | -78.107 | 0 | 0 | 0 | -56.374 |
| 900 | | | 5 | 0 | -79.108 | 0 | 0 | 0 | 0 |
| 901 | 2 | M181 | 1 | 0 | 73.623 | 0 | 0 | 0 | 0 |
| 902 | | | 2 | 0 | 72.706 | 0 | 0 | 0 | -52.02 |
| 903 | | | 3 | 0 | 71.789 | 0 | 0 | 0 | -103.388 |
| 904 | | | 4 | 0 | 70.871 | 0 | 0 | 0 | -154.104 |
| 905 | | | 5 | 0 | 69.954 | 0 | 0 | 0 | -204.168 |
| 906 | 2 | M182 | 1 | 0 | 69.45 | 0 | 2.748 | 0 | -209.943 |
| 907 | | | 2 | 0 | 67.616 | 0 | 2.748 | 0 | -307.398 |
| 908 | | | 3 | 0 | 65.781 | 0 | 2.748 | 0 | -402.243 |
| 909 | | | 4 | 0 | 63.947 | 0 | 2.748 | 0 | -494.481 |
| 910 | | | 5 | 0 | 62.113 | 0 | 2.748 | 0 | -584.109 |
| 911 | 2 | M183 | 1 | 0 | 62.113 | 0 | -2.111 | 0 | -584.112 |
| 912 | | | 2 | 0 | 60.278 | 0 | -2.111 | 0 | -671.132 |
| 913 | | | 3 | 0 | 58.444 | 0 | -2.111 | 0 | -755.544 |
| 914 | | | 4 | 0 | 56.61 | 0 | -2.111 | 0 | -837.348 |
| 915 | | | 5 | 0 | 54.775 | 0 | -2.111 | 0 | -916.543 |
| 916 | 2 | M184 | 1 | 0 | 55.119 | 0 | 6.939 | 0 | -921.961 |
| 917 | | | 2 | 0 | 52.826 | 0 | 6.939 | 0 | -1017.898 |
| 918 | | | 3 | 0 | 50.533 | 0 | 6.939 | 0 | -1109.759 |
| 919 | | | 4 | 0 | 48.24 | 0 | 6.939 | 0 | -1197.544 |
| 920 | | | 5 | 0 | 45.947 | 0 | 6.939 | 0 | -1281.254 |
| 921 | 2 | M185 | 1 | 0 | 45.947 | 0 | -6.385 | 0 | -1281.257 |
| 922 | | | 2 | 0 | 43.654 | 0 | -6.385 | 0 | -1360.89 |
| 923 | | | 3 | 0 | 41.361 | 0 | -6.385 | 0 | -1436.448 |
| 924 | | | 4 | 0 | 39.068 | 0 | -6.385 | 0 | -1507.93 |
| 925 | | | 5 | 0 | 36.775 | 0 | -6.385 | 0 | -1575.336 |
| 926 | 2 | M186 | 1 | 0 | 38.64 | 0 | 9.673 | 0 | -1579.667 |
| 927 | | | 2 | 0 | 36.347 | 0 | 9.673 | 0 | -1646.311 |
| 928 | | | 3 | 0 | 34.054 | 0 | 9.673 | 0 | -1708.879 |
| 929 | | | 4 | 0 | 31.761 | 0 | 9.673 | 0 | -1767.372 |
| 930 | | | 5 | 0 | 29.468 | 0 | 9.673 | 0 | -1821.788 |
| 931 | 2 | M187 | 1 | 0 | 29.468 | 0 | -9.271 | 0 | -1821.79 |
| 932 | | | 2 | 0 | 27.175 | 0 | -9.271 | 0 | -1872.131 |
| 933 | | | 3 | 0 | 24.882 | 0 | -9.271 | 0 | -1918.396 |
| 934 | | | 4 | 0 | 22.589 | 0 | -9.271 | 0 | -1960.586 |
| 935 | | | 5 | 0 | 20.296 | 0 | -9.271 | 0 | -1998.699 |
| 936 | 2 | M188 | 1 | 0 | 23.313 | 0 | 11.203 | 0 | -2001.469 |
| 937 | | | 2 | 0 | 21.02 | 0 | 11.203 | 0 | -2040.87 |
| 938 | | | 3 | 0 | 18.727 | 0 | 11.203 | 0 | -2076.195 |
| 939 | | | 4 | 0 | 16.434 | 0 | 11.203 | 0 | -2107.444 |
| 940 | | | 5 | 0 | 14.141 | 0 | 11.203 | 0 | -2134.618 |
| 941 | 2 | M189 | 1 | 0 | 14.141 | 0 | -10.995 | 0 | -2134.619 |
| 942 | | | 2 | 0 | 11.848 | 0 | -10.995 | 0 | -2157.717 |
| 943 | | | 3 | 0 | 9.555 | 0 | -10.995 | 0 | -2176.739 |
| 944 | | | 4 | 0 | 7.262 | 0 | -10.995 | 0 | -2191.685 |
| 945 | | | 5 | 0 | 4.969 | 0 | -10.995 | 0 | -2202.556 |
| 946 | 2 | M190 | 1 | 0 | 8.669 | 0 | 11.604 | 0 | -2203.466 |
| 947 | | | 2 | 0 | 6.376 | 0 | 11.604 | 0 | -2216.837 |
| 948 | | | 3 | 0 | 4.083 | 0 | 11.604 | 0 | -2226.132 |
| 949 | | | 4 | 0 | 1.79 | 0 | 11.604 | 0 | -2231.351 |
| 950 | | | 5 | 0 | -.503 | 0 | 11.604 | 0 | -2232.494 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 951 | 2 | M191 | 1 | 0 | -.503 | 0 | -11.612 | 0 | -2232.494 |
| 952 | | | 2 | 0 | -2.796 | 0 | -11.612 | 0 | -2229.562 |
| 953 | | | 3 | 0 | -5.089 | 0 | -11.612 | 0 | -2222.554 |
| 954 | | | 4 | 0 | -7.382 | 0 | -11.612 | 0 | -2211.47 |
| 955 | | | 5 | 0 | -9.675 | 0 | -11.612 | 0 | -2196.31 |
| 956 | 2 | M192 | 1 | 0 | -6.003 | 0 | 10.911 | 0 | -2195.263 |
| 957 | | | 2 | 0 | -8.296 | 0 | 10.911 | 0 | -2182.554 |
| 958 | | | 3 | 0 | -10.589 | 0 | 10.911 | 0 | -2165.77 |
| 959 | | | 4 | 0 | -12.882 | 0 | 10.911 | 0 | -2144.91 |
| 960 | | | 5 | 0 | -15.175 | 0 | 10.911 | 0 | -2119.975 |
| 961 | 2 | M193 | 1 | 0 | -15.175 | 0 | -11.134 | 0 | -2119.974 |
| 962 | | | 2 | 0 | -17.468 | 0 | -11.134 | 0 | -2090.962 |
| 963 | | | 3 | 0 | -19.761 | 0 | -11.134 | 0 | -2057.875 |
| 964 | | | 4 | 0 | -22.054 | 0 | -11.134 | 0 | -2020.712 |
| 965 | | | 5 | 0 | -24.347 | 0 | -11.134 | 0 | -1979.474 |
| 966 | 2 | M194 | 1 | 0 | -21.401 | 0 | 9.109 | 0 | -1976.582 |
| 967 | | | 2 | 0 | -23.694 | 0 | 9.109 | 0 | -1936.504 |
| 968 | | | 3 | 0 | -25.987 | 0 | 9.109 | 0 | -1892.35 |
| 969 | | | 4 | 0 | -28.28 | 0 | 9.109 | 0 | -1844.121 |
| 970 | | | 5 | 0 | -30.573 | 0 | 9.109 | 0 | -1791.815 |
| 971 | 2 | M195 | 1 | 0 | -30.573 | 0 | -9.524 | 0 | -1791.813 |
| 972 | | | 2 | 0 | -32.866 | 0 | -9.524 | 0 | -1735.432 |
| 973 | | | 3 | 0 | -35.159 | 0 | -9.524 | 0 | -1674.975 |
| 974 | | | 4 | 0 | -37.452 | 0 | -9.524 | 0 | -1610.443 |
| 975 | | | 5 | 0 | -39.745 | 0 | -9.524 | 0 | -1541.834 |
| 976 | 2 | M196 | 1 | 0 | -37.963 | 0 | 6.139 | 0 | -1537.41 |
| 977 | | | 2 | 0 | -40.256 | 0 | 6.139 | 0 | -1467.893 |
| 978 | | | 3 | 0 | -42.549 | 0 | 6.139 | 0 | -1394.3 |
| 979 | | | 4 | 0 | -44.842 | 0 | 6.139 | 0 | -1316.632 |
| 980 | | | 5 | 0 | -47.135 | 0 | 6.139 | 0 | -1234.888 |
| 981 | 2 | M197 | 1 | 0 | -47.135 | 0 | -6.702 | 0 | -1234.885 |
| 982 | | | 2 | 0 | -49.428 | 0 | -6.702 | 0 | -1149.065 |
| 983 | | | 3 | 0 | -51.721 | 0 | -6.702 | 0 | -1059.17 |
| 984 | | | 4 | 0 | -54.014 | 0 | -6.702 | 0 | -965.199 |
| 985 | | | 5 | 0 | -56.306 | 0 | -6.702 | 0 | -867.152 |
| 986 | 2 | M198 | 1 | 0 | -56.083 | 0 | 1.78 | 0 | -861.679 |
| 987 | | | 2 | 0 | -57.757 | 0 | 1.78 | 0 | -787.835 |
| 988 | | | 3 | 0 | -59.43 | 0 | 1.78 | 0 | -711.819 |
| 989 | | | 4 | 0 | -61.104 | 0 | 1.78 | 0 | -633.632 |
| 990 | | | 5 | 0 | -62.777 | 0 | 1.78 | 0 | -553.275 |
| 991 | 2 | M199 | 1 | 0 | -62.777 | 0 | -2.419 | 0 | -553.272 |
| 992 | | | 2 | 0 | -64.451 | 0 | -2.419 | 0 | -470.743 |
| 993 | | | 3 | 0 | -66.125 | 0 | -2.419 | 0 | -386.043 |
| 994 | | | 4 | 0 | -67.798 | 0 | -2.419 | 0 | -299.172 |
| 995 | | | 5 | 0 | -69.472 | 0 | -2.419 | 0 | -210.13 |
| 996 | 2 | M200 | 1 | 0 | -70.058 | 0 | 0 | 0 | -204.362 |
| 997 | | | 2 | 0 | -70.974 | 0 | 0 | 0 | -154.248 |
| 998 | | | 3 | 0 | -71.891 | 0 | 0 | 0 | -103.484 |
| 999 | | | 4 | 0 | -72.808 | 0 | 0 | 0 | -52.068 |
| 1000 | | | 5 | 0 | -73.725 | 0 | 0 | 0 | 0 |

SVC. I

## Joint Boundary Conditions

| | Joint Label | X [k/in] | Y [k/in] | Z [k/in] | X Rot.[k-ft/rad] | Y Rot.[k-ft/rad] | Z Rot.[k-ft/rad] | Footing |
|---|---|---|---|---|---|---|---|---|
| 1 | N1 | Reaction | Reaction | Reaction | | | | |
| 2 | N22 | Reaction | Reaction | Reaction | | | | |
| 3 | N43 | Reaction | Reaction | Reaction | | | | |
| 4 | N64 | Reaction | Reaction | Reaction | | | | |
| 5 | N85 | Reaction | Reaction | Reaction | | | | |
| 6 | N106 | Reaction | Reaction | Reaction | | | | |
| 7 | N127 | Reaction | Reaction | Reaction | | | | |
| 8 | N21 | Reaction | Reaction | Reaction | | | | |
| 9 | N42 | Reaction | Reaction | Reaction | | | | |
| 10 | N63 | Reaction | Reaction | Reaction | | | | |
| 11 | N84 | Reaction | Reaction | Reaction | | | | |
| 12 | N105 | Reaction | Reaction | Reaction | | | | |
| 13 | N126 | Reaction | Reaction | Reaction | | | | |
| 14 | N147 | Reaction | Reaction | Reaction | | | | |

## Member Section Forces (By Combination)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | M1 | 1 | 0 | 1.014 | 0 | -4.113 | 0 | 6.932 |
| 2 | | | 2 | 0 | 1.014 | 0 | -4.113 | 0 | 5.347 |
| 3 | | | 3 | 0 | 1.014 | 0 | -4.113 | 0 | 3.762 |
| 4 | | | 4 | 0 | 1.014 | 0 | -4.113 | 0 | 2.177 |
| 5 | | | 5 | 0 | 1.014 | 0 | -4.113 | 0 | .592 |
| 6 | 3 | M2 | 1 | 0 | 1.101 | 0 | -4.124 | 0 | 6.882 |
| 7 | | | 2 | 0 | 1.101 | 0 | -4.124 | 0 | 5.161 |
| 8 | | | 3 | 0 | 1.101 | 0 | -4.124 | 0 | 3.44 |
| 9 | | | 4 | 0 | 1.101 | 0 | -4.124 | 0 | 1.719 |
| 10 | | | 5 | 0 | 1.101 | 0 | -4.124 | 0 | -.002 |
| 11 | 3 | M3 | 1 | 0 | 1.525 | 0 | -3.582 | 0 | 6.135 |
| 12 | | | 2 | 0 | 1.525 | 0 | -3.582 | 0 | 3.752 |
| 13 | | | 3 | 0 | 1.525 | 0 | -3.582 | 0 | 1.368 |
| 14 | | | 4 | 0 | 1.525 | 0 | -3.582 | 0 | -1.015 |
| 15 | | | 5 | 0 | 1.525 | 0 | -3.582 | 0 | -3.399 |
| 16 | 3 | M4 | 1 | 0 | 1.062 | 0 | -4.201 | 0 | .588 |
| 17 | | | 2 | 0 | 1.062 | 0 | -4.201 | 0 | -1.072 |
| 18 | | | 3 | 0 | 1.062 | 0 | -4.201 | 0 | -2.732 |
| 19 | | | 4 | 0 | 1.062 | 0 | -4.201 | 0 | -4.393 |
| 20 | | | 5 | 0 | 1.062 | 0 | -4.201 | 0 | -6.053 |
| 21 | 3 | M5 | 1 | 0 | .677 | 0 | -4.435 | 0 | -2.184 |
| 22 | | | 2 | 0 | .677 | 0 | -4.435 | 0 | -3.241 |
| 23 | | | 3 | 0 | .677 | 0 | -4.435 | 0 | -4.298 |
| 24 | | | 4 | 0 | .677 | 0 | -4.435 | 0 | -5.355 |
| 25 | | | 5 | 0 | .677 | 0 | -4.435 | 0 | -6.412 |
| 26 | 3 | M6 | 1 | 0 | .133 | 0 | -4.672 | 0 | -2.692 |
| 27 | | | 2 | 0 | .133 | 0 | -4.672 | 0 | -2.899 |
| 28 | | | 3 | 0 | .133 | 0 | -4.672 | 0 | -3.107 |
| 29 | | | 4 | 0 | .133 | 0 | -4.672 | 0 | -3.314 |
| 30 | | | 5 | 0 | .133 | 0 | -4.672 | 0 | -3.522 |
| 31 | 3 | M7 | 1 | 0 | 3.665 | 0 | -3.91 | 0 | 29.251 |
| 32 | | | 2 | 0 | 3.665 | 0 | -3.91 | 0 | 23.525 |
| 33 | | | 3 | 0 | 3.665 | 0 | -3.91 | 0 | 17.799 |
| 34 | | | 4 | 0 | 3.665 | 0 | -3.91 | 0 | 12.073 |
| 35 | | | 5 | 0 | 3.665 | 0 | -3.91 | 0 | 6.347 |
| 36 | 3 | M8 | 1 | 0 | 4.964 | 0 | -3.915 | 0 | 33.411 |
| 37 | | | 2 | 0 | 4.964 | 0 | -3.915 | 0 | 25.655 |
| 38 | | | 3 | 0 | 4.964 | 0 | -3.915 | 0 | 17.899 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 39 | | | 4 | 0 | 4.964 | 0 | -3.915 | 0 | 10.143 |
| 40 | | | 5 | 0 | 4.964 | 0 | -3.915 | 0 | 2.387 |
| 41 | 3 | M9 | 1 | 0 | 6.954 | 0 | -3.381 | 0 | 28.677 |
| 42 | | | 2 | 0 | 6.954 | 0 | -3.381 | 0 | 17.812 |
| 43 | | | 3 | 0 | 6.954 | 0 | -3.381 | 0 | 6.947 |
| 44 | | | 4 | 0 | 6.954 | 0 | -3.381 | 0 | -3.919 |
| 45 | | | 5 | 0 | 6.954 | 0 | -3.381 | 0 | -14.784 |
| 46 | 3 | M10 | 1 | 0 | 4.857 | 0 | -3.965 | 0 | 3.139 |
| 47 | | | 2 | 0 | 4.857 | 0 | -3.965 | 0 | -4.45 |
| 48 | | | 3 | 0 | 4.857 | 0 | -3.965 | 0 | -12.038 |
| 49 | | | 4 | 0 | 4.857 | 0 | -3.965 | 0 | -19.627 |
| 50 | | | 5 | 0 | 4.857 | 0 | -3.965 | 0 | -27.216 |
| 51 | 3 | M11 | 1 | 0 | 2.887 | 0 | -4.159 | 0 | -9.951 |
| 52 | | | 2 | 0 | 2.887 | 0 | -4.159 | 0 | -14.462 |
| 53 | | | 3 | 0 | 2.887 | 0 | -4.159 | 0 | -18.972 |
| 54 | | | 4 | 0 | 2.887 | 0 | -4.159 | 0 | -23.483 |
| 55 | | | 5 | 0 | 2.887 | 0 | -4.159 | 0 | -27.994 |
| 56 | 3 | M12 | 1 | 0 | .636 | 0 | -4.357 | 0 | -11.521 |
| 57 | | | 2 | 0 | .636 | 0 | -4.357 | 0 | -12.515 |
| 58 | | | 3 | 0 | .636 | 0 | -4.357 | 0 | -13.508 |
| 59 | | | 4 | 0 | .636 | 0 | -4.357 | 0 | -14.502 |
| 60 | | | 5 | 0 | .636 | 0 | -4.357 | 0 | -15.496 |
| 61 | 3 | M13 | 1 | 0 | 6.687 | 0 | -3.248 | 0 | 55.44 |
| 62 | | | 2 | 0 | 6.687 | 0 | -3.248 | 0 | 44.991 |
| 63 | | | 3 | 0 | 6.687 | 0 | -3.248 | 0 | 34.541 |
| 64 | | | 4 | 0 | 6.687 | 0 | -3.248 | 0 | 24.092 |
| 65 | | | 5 | 0 | 6.687 | 0 | -3.248 | 0 | 13.643 |
| 66 | 3 | M14 | 1 | 0 | 9.463 | 0 | -3.238 | 0 | 64.592 |
| 67 | | | 2 | 0 | 9.463 | 0 | -3.238 | 0 | 49.806 |
| 68 | | | 3 | 0 | 9.463 | 0 | -3.238 | 0 | 35.021 |
| 69 | | | 4 | 0 | 9.463 | 0 | -3.238 | 0 | 20.236 |
| 70 | | | 5 | 0 | 9.463 | 0 | -3.238 | 0 | 5.451 |
| 71 | 3 | M15 | 1 | 0 | 12.306 | 0 | -2.872 | 0 | 54.683 |
| 72 | | | 2 | 0 | 12.306 | 0 | -2.872 | 0 | 35.455 |
| 73 | | | 3 | 0 | 12.306 | 0 | -2.872 | 0 | 16.227 |
| 74 | | | 4 | 0 | 12.306 | 0 | -2.872 | 0 | -3 |
| 75 | | | 5 | 0 | 12.306 | 0 | -2.872 | 0 | -22.228 |
| 76 | 3 | M16 | 1 | 0 | 8.94 | 0 | -3.237 | 0 | 10.942 |
| 77 | | | 2 | 0 | 8.94 | 0 | -3.237 | 0 | -3.027 |
| 78 | | | 3 | 0 | 8.94 | 0 | -3.237 | 0 | -16.996 |
| 79 | | | 4 | 0 | 8.94 | 0 | -3.237 | 0 | -30.964 |
| 80 | | | 5 | 0 | 8.94 | 0 | -3.237 | 0 | -44.933 |
| 81 | 3 | M17 | 1 | 0 | 5.517 | 0 | -3.349 | 0 | -13.099 |
| 82 | | | 2 | 0 | 5.517 | 0 | -3.349 | 0 | -21.72 |
| 83 | | | 3 | 0 | 5.517 | 0 | -3.349 | 0 | -30.34 |
| 84 | | | 4 | 0 | 5.517 | 0 | -3.349 | 0 | -38.961 |
| 85 | | | 5 | 0 | 5.517 | 0 | -3.349 | 0 | -47.582 |
| 86 | 3 | M18 | 1 | 0 | 1.805 | 0 | -3.475 | 0 | -17.254 |
| 87 | | | 2 | 0 | 1.805 | 0 | -3.475 | 0 | -20.074 |
| 88 | | | 3 | 0 | 1.805 | 0 | -3.475 | 0 | -22.895 |
| 89 | | | 4 | 0 | 1.805 | 0 | -3.475 | 0 | -25.715 |
| 90 | | | 5 | 0 | 1.805 | 0 | -3.475 | 0 | -28.536 |
| 91 | 3 | M19 | 1 | 0 | 8.375 | 0 | -2.133 | 0 | 72.043 |
| 92 | | | 2 | 0 | 8.375 | 0 | -2.133 | 0 | 58.958 |
| 93 | | | 3 | 0 | 8.375 | 0 | -2.133 | 0 | 45.873 |
| 94 | | | 4 | 0 | 8.375 | 0 | -2.133 | 0 | 32.787 |
| 95 | | | 5 | 0 | 8.375 | 0 | -2.133 | 0 | 19.702 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 96 | 3 | M20 | 1 | 0 | 12.208 | 0 | -2.128 | 0 | 85.628 |
| 97 | | | 2 | 0 | 12.208 | 0 | -2.128 | 0 | 66.553 |
| 98 | | | 3 | 0 | 12.208 | 0 | -2.128 | 0 | 47.477 |
| 99 | | | 4 | 0 | 12.208 | 0 | -2.128 | 0 | 28.402 |
| 100 | | | 5 | 0 | 12.208 | 0 | -2.128 | 0 | 9.326 |
| 101 | 3 | M21 | 1 | 0 | 15.21 | 0 | -1.906 | 0 | 72.74 |
| 102 | | | 2 | 0 | 15.21 | 0 | -1.906 | 0 | 48.974 |
| 103 | | | 3 | 0 | 15.21 | 0 | -1.906 | 0 | 25.209 |
| 104 | | | 4 | 0 | 15.21 | 0 | -1.906 | 0 | 1.444 |
| 105 | | | 5 | 0 | 15.21 | 0 | -1.906 | 0 | -22.322 |
| 106 | 3 | M22 | 1 | 0 | 11.565 | 0 | -2.106 | 0 | 20.131 |
| 107 | | | 2 | 0 | 11.565 | 0 | -2.106 | 0 | 2.061 |
| 108 | | | 3 | 0 | 11.565 | 0 | -2.106 | 0 | -16.01 |
| 109 | | | 4 | 0 | 11.565 | 0 | -2.106 | 0 | -34.08 |
| 110 | | | 5 | 0 | 11.565 | 0 | -2.106 | 0 | -52.151 |
| 111 | 3 | M23 | 1 | 0 | 7.387 | 0 | -2.153 | 0 | -11.553 |
| 112 | | | 2 | 0 | 7.387 | 0 | -2.153 | 0 | -23.096 |
| 113 | | | 3 | 0 | 7.387 | 0 | -2.153 | 0 | -34.639 |
| 114 | | | 4 | 0 | 7.387 | 0 | -2.153 | 0 | -46.182 |
| 115 | | | 5 | 0 | 7.387 | 0 | -2.153 | 0 | -57.725 |
| 116 | 3 | M24 | 1 | 0 | 2.752 | 0 | -2.218 | 0 | -19.114 |
| 117 | | | 2 | 0 | 2.752 | 0 | -2.218 | 0 | -23.414 |
| 118 | | | 3 | 0 | 2.752 | 0 | -2.218 | 0 | -27.714 |
| 119 | | | 4 | 0 | 2.752 | 0 | -2.218 | 0 | -32.014 |
| 120 | | | 5 | 0 | 2.752 | 0 | -2.218 | 0 | -36.314 |
| 121 | 3 | M25 | 1 | 0 | 9.196 | 0 | -.71 | 0 | 80.315 |
| 122 | | | 2 | 0 | 9.196 | 0 | -.71 | 0 | 65.947 |
| 123 | | | 3 | 0 | 9.196 | 0 | -.71 | 0 | 51.578 |
| 124 | | | 4 | 0 | 9.196 | 0 | -.71 | 0 | 37.209 |
| 125 | | | 5 | 0 | 9.196 | 0 | -.71 | 0 | 22.841 |
| 126 | 3 | M26 | 1 | 0 | 13.469 | 0 | -.709 | 0 | 96.189 |
| 127 | | | 2 | 0 | 13.469 | 0 | -.709 | 0 | 75.143 |
| 128 | | | 3 | 0 | 13.469 | 0 | -.709 | 0 | 54.098 |
| 129 | | | 4 | 0 | 13.469 | 0 | -.709 | 0 | 33.052 |
| 130 | | | 5 | 0 | 13.469 | 0 | -.709 | 0 | 12.007 |
| 131 | 3 | M27 | 1 | 0 | 16.563 | 0 | -.637 | 0 | 82.394 |
| 132 | | | 2 | 0 | 16.563 | 0 | -.637 | 0 | 56.514 |
| 133 | | | 3 | 0 | 16.563 | 0 | -.637 | 0 | 30.634 |
| 134 | | | 4 | 0 | 16.563 | 0 | -.637 | 0 | 4.754 |
| 135 | | | 5 | 0 | 16.563 | 0 | -.637 | 0 | -21.127 |
| 136 | 3 | M28 | 1 | 0 | 12.828 | 0 | -.698 | 0 | 25.87 |
| 137 | | | 2 | 0 | 12.828 | 0 | -.698 | 0 | 5.826 |
| 138 | | | 3 | 0 | 12.828 | 0 | -.698 | 0 | -14.218 |
| 139 | | | 4 | 0 | 12.828 | 0 | -.698 | 0 | -34.262 |
| 140 | | | 5 | 0 | 12.828 | 0 | -.698 | 0 | -54.305 |
| 141 | 3 | M29 | 1 | 0 | 8.387 | 0 | -.71 | 0 | -9.448 |
| 142 | | | 2 | 0 | 8.387 | 0 | -.71 | 0 | -22.552 |
| 143 | | | 3 | 0 | 8.387 | 0 | -.71 | 0 | -35.656 |
| 144 | | | 4 | 0 | 8.387 | 0 | -.71 | 0 | -48.76 |
| 145 | | | 5 | 0 | 8.387 | 0 | -.71 | 0 | -61.864 |
| 146 | 3 | M30 | 1 | 0 | 3.329 | 0 | -.729 | 0 | -19.248 |
| 147 | | | 2 | 0 | 3.329 | 0 | -.729 | 0 | -24.45 |
| 148 | | | 3 | 0 | 3.329 | 0 | -.729 | 0 | -29.653 |
| 149 | | | 4 | 0 | 3.329 | 0 | -.729 | 0 | -34.855 |
| 150 | | | 5 | 0 | 3.329 | 0 | -.729 | 0 | -40.057 |
| 151 | 3 | M31 | 1 | 0 | 9.166 | 0 | .817 | 0 | 80.013 |
| 152 | | | 2 | 0 | 9.166 | 0 | .817 | 0 | 65.691 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 153 | | | 3 | 0 | 9.166 | 0 | .817 | 0 | 51.368 |
| 154 | | | 4 | 0 | 9.166 | 0 | .817 | 0 | 37.046 |
| 155 | | | 5 | 0 | 9.166 | 0 | .817 | 0 | 22.723 |
| 156 | 3 | M32 | 1 | 0 | 13.425 | 0 | .815 | 0 | 95.801 |
| 157 | | | 2 | 0 | 13.425 | 0 | .815 | 0 | 74.825 |
| 158 | | | 3 | 0 | 13.425 | 0 | .815 | 0 | 53.848 |
| 159 | | | 4 | 0 | 13.425 | 0 | .815 | 0 | 32.871 |
| 160 | | | 5 | 0 | 13.425 | 0 | .815 | 0 | 11.894 |
| 161 | 3 | M33 | 1 | 0 | 16.515 | 0 | .733 | 0 | 82.029 |
| 162 | | | 2 | 0 | 16.515 | 0 | .733 | 0 | 56.224 |
| 163 | | | 3 | 0 | 16.515 | 0 | .733 | 0 | 30.419 |
| 164 | | | 4 | 0 | 16.515 | 0 | .733 | 0 | 4.614 |
| 165 | | | 5 | 0 | 16.515 | 0 | .733 | 0 | -21.191 |
| 166 | 3 | M34 | 1 | 0 | 12.783 | 0 | .803 | 0 | 25.642 |
| 167 | | | 2 | 0 | 12.783 | 0 | .803 | 0 | 5.668 |
| 168 | | | 3 | 0 | 12.783 | 0 | .803 | 0 | -14.305 |
| 169 | | | 4 | 0 | 12.783 | 0 | .803 | 0 | -34.279 |
| 170 | | | 5 | 0 | 12.783 | 0 | .803 | 0 | -54.252 |
| 171 | 3 | M35 | 1 | 0 | 8.349 | 0 | .817 | 0 | -9.548 |
| 172 | | | 2 | 0 | 8.349 | 0 | .817 | 0 | -22.594 |
| 173 | | | 3 | 0 | 8.349 | 0 | .817 | 0 | -35.64 |
| 174 | | | 4 | 0 | 8.349 | 0 | .817 | 0 | -48.686 |
| 175 | | | 5 | 0 | 8.349 | 0 | .817 | 0 | -61.732 |
| 176 | 3 | M36 | 1 | 0 | 3.306 | 0 | .838 | 0 | -19.259 |
| 177 | | | 2 | 0 | 3.306 | 0 | .838 | 0 | -24.425 |
| 178 | | | 3 | 0 | 3.306 | 0 | .838 | 0 | -29.591 |
| 179 | | | 4 | 0 | 3.306 | 0 | .838 | 0 | -34.757 |
| 180 | | | 5 | 0 | 3.306 | 0 | .838 | 0 | -39.923 |
| 181 | 3 | M37 | 1 | 0 | 8.286 | 0 | 2.224 | 0 | 71.146 |
| 182 | | | 2 | 0 | 8.286 | 0 | 2.224 | 0 | 58.199 |
| 183 | | | 3 | 0 | 8.286 | 0 | 2.224 | 0 | 45.253 |
| 184 | | | 4 | 0 | 8.286 | 0 | 2.224 | 0 | 32.306 |
| 185 | | | 5 | 0 | 8.286 | 0 | 2.224 | 0 | 19.359 |
| 186 | 3 | M38 | 1 | 0 | 12.07 | 0 | 2.218 | 0 | 84.479 |
| 187 | | | 2 | 0 | 12.07 | 0 | 2.218 | 0 | 65.62 |
| 188 | | | 3 | 0 | 12.07 | 0 | 2.218 | 0 | 46.762 |
| 189 | | | 4 | 0 | 12.07 | 0 | 2.218 | 0 | 27.903 |
| 190 | | | 5 | 0 | 12.07 | 0 | 2.218 | 0 | 9.044 |
| 191 | 3 | M39 | 1 | 0 | 15.059 | 0 | 1.987 | 0 | 71.699 |
| 192 | | | 2 | 0 | 15.059 | 0 | 1.987 | 0 | 48.169 |
| 193 | | | 3 | 0 | 15.059 | 0 | 1.987 | 0 | 24.638 |
| 194 | | | 4 | 0 | 15.059 | 0 | 1.987 | 0 | 1.108 |
| 195 | | | 5 | 0 | 15.059 | 0 | 1.987 | 0 | -22.422 |
| 196 | 3 | M40 | 1 | 0 | 11.426 | 0 | 2.197 | 0 | 19.537 |
| 197 | | | 2 | 0 | 11.426 | 0 | 2.197 | 0 | 1.683 |
| 198 | | | 3 | 0 | 11.426 | 0 | 2.197 | 0 | -16.171 |
| 199 | | | 4 | 0 | 11.426 | 0 | 2.197 | 0 | -34.024 |
| 200 | | | 5 | 0 | 11.426 | 0 | 2.197 | 0 | -51.878 |
| 201 | 3 | M41 | 1 | 0 | 7.281 | 0 | 2.248 | 0 | -11.744 |
| 202 | | | 2 | 0 | 7.281 | 0 | 2.248 | 0 | -23.121 |
| 203 | | | 3 | 0 | 7.281 | 0 | 2.248 | 0 | -34.498 |
| 204 | | | 4 | 0 | 7.281 | 0 | 2.248 | 0 | -45.875 |
| 205 | | | 5 | 0 | 7.281 | 0 | 2.248 | 0 | -57.253 |
| 206 | 3 | M42 | 1 | 0 | 2.693 | 0 | 2.316 | 0 | -19.077 |
| 207 | | | 2 | 0 | 2.693 | 0 | 2.316 | 0 | -23.285 |
| 208 | | | 3 | 0 | 2.693 | 0 | 2.316 | 0 | -27.492 |
| 209 | | | 4 | 0 | 2.693 | 0 | 2.316 | 0 | -31.699 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 210 | | | 5 | 0 | 2.693 | 0 | 2.316 | 0 | -35.907 |
| 211 | 3 | M43 | 1 | 0 | 6.546 | 0 | 3.312 | 0 | 53.974 |
| 212 | | | 2 | 0 | 6.546 | 0 | 3.312 | 0 | 43.745 |
| 213 | | | 3 | 0 | 6.546 | 0 | 3.312 | 0 | 33.516 |
| 214 | | | 4 | 0 | 6.546 | 0 | 3.312 | 0 | 23.287 |
| 215 | | | 5 | 0 | 6.546 | 0 | 3.312 | 0 | 13.058 |
| 216 | 3 | M44 | 1 | 0 | 9.21 | 0 | 3.3 | 0 | 62.68 |
| 217 | | | 2 | 0 | 9.21 | 0 | 3.3 | 0 | 48.288 |
| 218 | | | 3 | 0 | 9.21 | 0 | 3.3 | 0 | 33.897 |
| 219 | | | 4 | 0 | 9.21 | 0 | 3.3 | 0 | 19.506 |
| 220 | | | 5 | 0 | 9.21 | 0 | 3.3 | 0 | 5.115 |
| 221 | 3 | M45 | 1 | 0 | 12.029 | 0 | 2.924 | 0 | 53.086 |
| 222 | | | 2 | 0 | 12.029 | 0 | 2.924 | 0 | 34.291 |
| 223 | | | 3 | 0 | 12.029 | 0 | 2.924 | 0 | 15.496 |
| 224 | | | 4 | 0 | 12.029 | 0 | 2.924 | 0 | -3.299 |
| 225 | | | 5 | 0 | 12.029 | 0 | 2.924 | 0 | -22.094 |
| 226 | 3 | M46 | 1 | 0 | 8.695 | 0 | 3.302 | 0 | 10.248 |
| 227 | | | 2 | 0 | 8.695 | 0 | 3.302 | 0 | -3.337 |
| 228 | | | 3 | 0 | 8.695 | 0 | 3.302 | 0 | -16.923 |
| 229 | | | 4 | 0 | 8.695 | 0 | 3.302 | 0 | -30.508 |
| 230 | | | 5 | 0 | 8.695 | 0 | 3.302 | 0 | -44.094 |
| 231 | 3 | M47 | 1 | 0 | 5.359 | 0 | 3.42 | 0 | -13.044 |
| 232 | | | 2 | 0 | 5.359 | 0 | 3.42 | 0 | -21.417 |
| 233 | | | 3 | 0 | 5.359 | 0 | 3.42 | 0 | -29.791 |
| 234 | | | 4 | 0 | 5.359 | 0 | 3.42 | 0 | -38.165 |
| 235 | | | 5 | 0 | 5.359 | 0 | 3.42 | 0 | -46.539 |
| 236 | 3 | M48 | 1 | 0 | 1.742 | 0 | 3.552 | 0 | -16.953 |
| 237 | | | 2 | 0 | 1.742 | 0 | 3.552 | 0 | -19.674 |
| 238 | | | 3 | 0 | 1.742 | 0 | 3.552 | 0 | -22.395 |
| 239 | | | 4 | 0 | 1.742 | 0 | 3.552 | 0 | -25.117 |
| 240 | | | 5 | 0 | 1.742 | 0 | 3.552 | 0 | -27.838 |
| 241 | 3 | M49 | 1 | 0 | 3.376 | 0 | 3.937 | 0 | 26.858 |
| 242 | | | 2 | 0 | 3.376 | 0 | 3.937 | 0 | 21.583 |
| 243 | | | 3 | 0 | 3.376 | 0 | 3.937 | 0 | 16.309 |
| 244 | | | 4 | 0 | 3.376 | 0 | 3.937 | 0 | 11.035 |
| 245 | | | 5 | 0 | 3.376 | 0 | 3.937 | 0 | 5.76 |
| 246 | 3 | M50 | 1 | 0 | 4.552 | 0 | 3.944 | 0 | 30.631 |
| 247 | | | 2 | 0 | 4.552 | 0 | 3.944 | 0 | 23.518 |
| 248 | | | 3 | 0 | 4.552 | 0 | 3.944 | 0 | 16.405 |
| 249 | | | 4 | 0 | 4.552 | 0 | 3.944 | 0 | 9.292 |
| 250 | | | 5 | 0 | 4.552 | 0 | 3.944 | 0 | 2.179 |
| 251 | 3 | M51 | 1 | 0 | 6.425 | 0 | 3.397 | 0 | 26.346 |
| 252 | | | 2 | 0 | 6.425 | 0 | 3.397 | 0 | 16.306 |
| 253 | | | 3 | 0 | 6.425 | 0 | 3.397 | 0 | 6.267 |
| 254 | | | 4 | 0 | 6.425 | 0 | 3.397 | 0 | -3.773 |
| 255 | | | 5 | 0 | 6.425 | 0 | 3.397 | 0 | -13.812 |
| 256 | 3 | M52 | 1 | 0 | 4.479 | 0 | 3.998 | 0 | 2.681 |
| 257 | | | 2 | 0 | 4.479 | 0 | 3.998 | 0 | -4.318 |
| 258 | | | 3 | 0 | 4.479 | 0 | 3.998 | 0 | -11.317 |
| 259 | | | 4 | 0 | 4.479 | 0 | 3.998 | 0 | -18.316 |
| 260 | | | 5 | 0 | 4.479 | 0 | 3.998 | 0 | -25.315 |
| 261 | 3 | M53 | 1 | 0 | 2.65 | 0 | 4.198 | 0 | -9.426 |
| 262 | | | 2 | 0 | 2.65 | 0 | 4.198 | 0 | -13.567 |
| 263 | | | 3 | 0 | 2.65 | 0 | 4.198 | 0 | -17.708 |
| 264 | | | 4 | 0 | 2.65 | 0 | 4.198 | 0 | -21.85 |
| 265 | | | 5 | 0 | 2.65 | 0 | 4.198 | 0 | -25.991 |
| 266 | 3 | M54 | 1 | 0 | .55 | 0 | 4.401 | 0 | -10.829 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 267 | | | 2 | 0 | .55 | 0 | 4.401 | 0 | -11.689 |
| 268 | | | 3 | 0 | .55 | 0 | 4.401 | 0 | -12.548 |
| 269 | | | 4 | 0 | .55 | 0 | 4.401 | 0 | -13.408 |
| 270 | | | 5 | 0 | .55 | 0 | 4.401 | 0 | -14.268 |
| 271 | 3 | M55 | 1 | 0 | .878 | 0 | 4.112 | 0 | 6.271 |
| 272 | | | 2 | 0 | .878 | 0 | 4.112 | 0 | 4.899 |
| 273 | | | 3 | 0 | .878 | 0 | 4.112 | 0 | 3.527 |
| 274 | | | 4 | 0 | .878 | 0 | 4.112 | 0 | 2.154 |
| 275 | | | 5 | 0 | .878 | 0 | 4.112 | 0 | .782 |
| 276 | 3 | M56 | 1 | 0 | 1.025 | 0 | 4.123 | 0 | 6.461 |
| 277 | | | 2 | 0 | 1.025 | 0 | 4.123 | 0 | 4.858 |
| 278 | | | 3 | 0 | 1.025 | 0 | 4.123 | 0 | 3.256 |
| 279 | | | 4 | 0 | 1.025 | 0 | 4.123 | 0 | 1.654 |
| 280 | | | 5 | 0 | 1.025 | 0 | 4.123 | 0 | .052 |
| 281 | 3 | M57 | 1 | 0 | 1.374 | 0 | 3.593 | 0 | 5.592 |
| 282 | | | 2 | 0 | 1.374 | 0 | 3.593 | 0 | 3.446 |
| 283 | | | 3 | 0 | 1.374 | 0 | 3.593 | 0 | 1.299 |
| 284 | | | 4 | 0 | 1.374 | 0 | 3.593 | 0 | -.848 |
| 285 | | | 5 | 0 | 1.374 | 0 | 3.593 | 0 | -2.994 |
| 286 | 3 | M58 | 1 | 0 | 1.014 | 0 | 4.201 | 0 | .582 |
| 287 | | | 2 | 0 | 1.014 | 0 | 4.201 | 0 | -1.002 |
| 288 | | | 3 | 0 | 1.014 | 0 | 4.201 | 0 | -2.587 |
| 289 | | | 4 | 0 | 1.014 | 0 | 4.201 | 0 | -4.172 |
| 290 | | | 5 | 0 | 1.014 | 0 | 4.201 | 0 | -5.757 |
| 291 | 3 | M59 | 1 | 0 | .612 | 0 | 4.434 | 0 | -2.286 |
| 292 | | | 2 | 0 | .612 | 0 | 4.434 | 0 | -3.242 |
| 293 | | | 3 | 0 | .612 | 0 | 4.434 | 0 | -4.198 |
| 294 | | | 4 | 0 | .612 | 0 | 4.434 | 0 | -5.154 |
| 295 | | | 5 | 0 | .612 | 0 | 4.434 | 0 | -6.11 |
| 296 | 3 | M60 | 1 | 0 | .063 | 0 | 4.667 | 0 | -2.77 |
| 297 | | | 2 | 0 | .063 | 0 | 4.667 | 0 | -2.869 |
| 298 | | | 3 | 0 | .063 | 0 | 4.667 | 0 | -2.969 |
| 299 | | | 4 | 0 | .063 | 0 | 4.667 | 0 | -3.068 |
| 300 | | | 5 | 0 | .063 | 0 | 4.667 | 0 | -3.167 |
| 301 | 3 | M61 | 1 | 0 | 112.131 | 0 | 0 | 0 | 0 |
| 302 | | | 2 | 0 | 111.224 | 0 | 0 | 0 | -83.758 |
| 303 | | | 3 | 0 | 110.316 | 0 | 0 | 0 | -166.836 |
| 304 | | | 4 | 0 | 109.409 | 0 | 0 | 0 | -249.233 |
| 305 | | | 5 | 0 | 108.501 | 0 | 0 | 0 | -330.949 |
| 306 | 3 | M62 | 1 | 0 | 106.987 | 0 | 4.885 | 0 | -326.858 |
| 307 | | | 2 | 0 | 105.172 | 0 | 4.885 | 0 | -485.977 |
| 308 | | | 3 | 0 | 103.357 | 0 | 4.885 | 0 | -642.372 |
| 309 | | | 4 | 0 | 101.542 | 0 | 4.885 | 0 | -796.046 |
| 310 | | | 5 | 0 | 99.727 | 0 | 4.885 | 0 | -946.996 |
| 311 | 3 | M63 | 1 | 0 | 99.727 | 0 | -2.994 | 0 | -947.004 |
| 312 | | | 2 | 0 | 97.912 | 0 | -2.994 | 0 | -1095.233 |
| 313 | | | 3 | 0 | 96.097 | 0 | -2.994 | 0 | -1240.739 |
| 314 | | | 4 | 0 | 94.282 | 0 | -2.994 | 0 | -1383.523 |
| 315 | | | 5 | 0 | 92.467 | 0 | -2.994 | 0 | -1523.584 |
| 316 | 3 | M64 | 1 | 0 | 88.302 | 0 | 12.019 | 0 | -1519.731 |
| 317 | | | 2 | 0 | 86.033 | 0 | 12.019 | 0 | -1683.17 |
| 318 | | | 3 | 0 | 83.765 | 0 | 12.019 | 0 | -1842.355 |
| 319 | | | 4 | 0 | 81.496 | 0 | 12.019 | 0 | -1997.287 |
| 320 | | | 5 | 0 | 79.227 | 0 | 12.019 | 0 | -2147.964 |
| 321 | 3 | M65 | 1 | 0 | 79.227 | 0 | -10.317 | 0 | -2147.973 |
| 322 | | | 2 | 0 | 76.958 | 0 | -10.317 | 0 | -2294.396 |
| 323 | | | 3 | 0 | 74.69 | 0 | -10.317 | 0 | -2436.565 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 324 | | | 4 | 0 | 72.421 | 0 | -10.317 | 0 | -2574.481 |
| 325 | | | 5 | 0 | 70.152 | 0 | -10.317 | 0 | -2708.143 |
| 326 | 3 | M66 | 1 | 0 | 62.965 | 0 | 16.979 | 0 | -2704.929 |
| 327 | | | 2 | 0 | 60.696 | 0 | 16.979 | 0 | -2820.861 |
| 328 | | | 3 | 0 | 58.427 | 0 | 16.979 | 0 | -2932.538 |
| 329 | | | 4 | 0 | 56.159 | 0 | 16.979 | 0 | -3039.962 |
| 330 | | | 5 | 0 | 53.89 | 0 | 16.979 | 0 | -3143.133 |
| 331 | 3 | M67 | 1 | 0 | 53.89 | 0 | -15.705 | 0 | -3143.139 |
| 332 | | | 2 | 0 | 51.621 | 0 | -15.705 | 0 | -3242.055 |
| 333 | | | 3 | 0 | 49.352 | 0 | -15.705 | 0 | -3336.718 |
| 334 | | | 4 | 0 | 47.084 | 0 | -15.705 | 0 | -3427.126 |
| 335 | | | 5 | 0 | 44.815 | 0 | -15.705 | 0 | -3513.28 |
| 336 | 3 | M68 | 1 | 0 | 35.94 | 0 | 19.816 | 0 | -3511.169 |
| 337 | | | 2 | 0 | 33.672 | 0 | 19.816 | 0 | -3576.43 |
| 338 | | | 3 | 0 | 31.403 | 0 | 19.816 | 0 | -3637.437 |
| 339 | | | 4 | 0 | 29.134 | 0 | 19.816 | 0 | -3694.19 |
| 340 | | | 5 | 0 | 26.865 | 0 | 19.816 | 0 | -3746.689 |
| 341 | 3 | M69 | 1 | 0 | 26.865 | 0 | -19.145 | 0 | -3746.693 |
| 342 | | | 2 | 0 | 24.597 | 0 | -19.145 | 0 | -3794.938 |
| 343 | | | 3 | 0 | 22.328 | 0 | -19.145 | 0 | -3838.929 |
| 344 | | | 4 | 0 | 20.059 | 0 | -19.145 | 0 | -3878.667 |
| 345 | | | 5 | 0 | 17.79 | 0 | -19.145 | 0 | -3914.151 |
| 346 | 3 | M70 | 1 | 0 | 8.094 | 0 | 20.474 | 0 | -3913.447 |
| 347 | | | 2 | 0 | 5.826 | 0 | 20.474 | 0 | -3926.497 |
| 348 | | | 3 | 0 | 3.557 | 0 | 20.474 | 0 | -3935.294 |
| 349 | | | 4 | 0 | 1.288 | 0 | 20.474 | 0 | -3939.836 |
| 350 | | | 5 | 0 | -.981 | 0 | 20.474 | 0 | -3940.124 |
| 351 | 3 | M71 | 1 | 0 | -.981 | 0 | -20.499 | 0 | -3940.124 |
| 352 | | | 2 | 0 | -3.249 | 0 | -20.499 | 0 | -3936.159 |
| 353 | | | 3 | 0 | -5.518 | 0 | -20.499 | 0 | -3927.939 |
| 354 | | | 4 | 0 | -7.787 | 0 | -20.499 | 0 | -3915.466 |
| 355 | | | 5 | 0 | -10.056 | 0 | -20.499 | 0 | -3898.739 |
| 356 | 3 | M72 | 1 | 0 | -19.722 | 0 | 18.97 | 0 | -3899.548 |
| 357 | | | 2 | 0 | -21.991 | 0 | 18.97 | 0 | -3860.443 |
| 358 | | | 3 | 0 | -24.259 | 0 | 18.97 | 0 | -3817.083 |
| 359 | | | 4 | 0 | -26.528 | 0 | 18.97 | 0 | -3769.47 |
| 360 | | | 5 | 0 | -28.797 | 0 | 18.97 | 0 | -3717.603 |
| 361 | 3 | M73 | 1 | 0 | -28.797 | 0 | -19.689 | 0 | -3717.599 |
| 362 | | | 2 | 0 | -31.066 | 0 | -19.689 | 0 | -3661.479 |
| 363 | | | 3 | 0 | -33.334 | 0 | -19.689 | 0 | -3601.104 |
| 364 | | | 4 | 0 | -35.603 | 0 | -19.689 | 0 | -3536.475 |
| 365 | | | 5 | 0 | -37.872 | 0 | -19.689 | 0 | -3467.593 |
| 366 | 3 | M74 | 1 | 0 | -46.658 | 0 | 15.389 | 0 | -3469.795 |
| 367 | | | 2 | 0 | -48.927 | 0 | 15.389 | 0 | -3380.185 |
| 368 | | | 3 | 0 | -51.195 | 0 | 15.389 | 0 | -3286.321 |
| 369 | | | 4 | 0 | -53.464 | 0 | 15.389 | 0 | -3188.203 |
| 370 | | | 5 | 0 | -55.733 | 0 | 15.389 | 0 | -3085.831 |
| 371 | 3 | M75 | 1 | 0 | -55.733 | 0 | -16.699 | 0 | -3085.824 |
| 372 | | | 2 | 0 | -58.002 | 0 | -16.699 | 0 | -2979.199 |
| 373 | | | 3 | 0 | -60.27 | 0 | -16.699 | 0 | -2868.319 |
| 374 | | | 4 | 0 | -62.539 | 0 | -16.699 | 0 | -2753.186 |
| 375 | | | 5 | 0 | -64.808 | 0 | -16.699 | 0 | -2633.799 |
| 376 | 3 | M76 | 1 | 0 | -71.854 | 0 | 9.87 | 0 | -2637.075 |
| 377 | | | 2 | 0 | -74.123 | 0 | 9.87 | 0 | -2500.222 |
| 378 | | | 3 | 0 | -76.392 | 0 | 9.87 | 0 | -2359.115 |
| 379 | | | 4 | 0 | -78.66 | 0 | 9.87 | 0 | -2213.754 |
| 380 | | | 5 | 0 | -80.929 | 0 | 9.87 | 0 | -2064.14 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 381 | 3 | M77 | 1 | 0 | -80.929 | 0 | -11.595 | 0 | -2064.131 |
| 382 | | | 2 | 0 | -83.198 | 0 | -11.595 | 0 | -1910.262 |
| 383 | | | 3 | 0 | -85.467 | 0 | -11.595 | 0 | -1752.14 |
| 384 | | | 4 | 0 | -87.735 | 0 | -11.595 | 0 | -1589.764 |
| 385 | | | 5 | 0 | -90.004 | 0 | -11.595 | 0 | -1423.134 |
| 386 | 3 | M78 | 1 | 0 | -93.88 | 0 | 2.449 | 0 | -1427.011 |
| 387 | | | 2 | 0 | -95.536 | 0 | 2.449 | 0 | -1297.405 |
| 388 | | | 3 | 0 | -97.192 | 0 | 2.449 | 0 | -1165.532 |
| 389 | | | 4 | 0 | -98.847 | 0 | 2.449 | 0 | -1031.394 |
| 390 | | | 5 | 0 | -100.503 | 0 | 2.449 | 0 | -894.989 |
| 391 | 3 | M79 | 1 | 0 | -100.503 | 0 | -4.344 | 0 | -894.982 |
| 392 | | | 2 | 0 | -102.159 | 0 | -4.344 | 0 | -756.312 |
| 393 | | | 3 | 0 | -103.815 | 0 | -4.344 | 0 | -615.376 |
| 394 | | | 4 | 0 | -105.471 | 0 | -4.344 | 0 | -472.173 |
| 395 | | | 5 | 0 | -107.127 | 0 | -4.344 | 0 | -326.705 |
| 396 | 3 | M80 | 1 | 0 | -108.505 | 0 | 0 | 0 | -330.798 |
| 397 | | | 2 | 0 | -109.412 | 0 | 0 | 0 | -249.119 |
| 398 | | | 3 | 0 | -110.319 | 0 | 0 | 0 | -166.759 |
| 399 | | | 4 | 0 | -111.226 | 0 | 0 | 0 | -83.72 |
| 400 | | | 5 | 0 | -112.133 | 0 | 0 | 0 | 0 |
| 401 | 3 | M81 | 1 | 0 | 105.385 | 0 | 0 | 0 | 0 |
| 402 | | | 2 | 0 | 104.396 | 0 | 0 | 0 | -77.986 |
| 403 | | | 3 | 0 | 103.407 | 0 | 0 | 0 | -155.237 |
| 404 | | | 4 | 0 | 102.418 | 0 | 0 | 0 | -231.753 |
| 405 | | | 5 | 0 | 101.429 | 0 | 0 | 0 | -307.533 |
| 406 | 3 | M82 | 1 | 0 | 100.342 | 0 | 4.371 | 0 | -307.542 |
| 407 | | | 2 | 0 | 98.365 | 0 | 4.371 | 0 | -455.28 |
| 408 | | | 3 | 0 | 96.387 | 0 | 4.371 | 0 | -600.078 |
| 409 | | | 4 | 0 | 94.409 | 0 | 4.371 | 0 | -741.934 |
| 410 | | | 5 | 0 | 92.431 | 0 | 4.371 | 0 | -880.85 |
| 411 | 3 | M83 | 1 | 0 | 92.431 | 0 | -2.956 | 0 | -880.855 |
| 412 | | | 2 | 0 | 90.454 | 0 | -2.956 | 0 | -1016.83 |
| 413 | | | 3 | 0 | 88.476 | 0 | -2.956 | 0 | -1149.865 |
| 414 | | | 4 | 0 | 86.498 | 0 | -2.956 | 0 | -1279.958 |
| 415 | | | 5 | 0 | 84.521 | 0 | -2.956 | 0 | -1407.11 |
| 416 | 3 | M84 | 1 | 0 | 82.222 | 0 | 10.939 | 0 | -1407.158 |
| 417 | | | 2 | 0 | 79.749 | 0 | 10.939 | 0 | -1557.689 |
| 418 | | | 3 | 0 | 77.277 | 0 | 10.939 | 0 | -1703.625 |
| 419 | | | 4 | 0 | 74.805 | 0 | 10.939 | 0 | -1844.966 |
| 420 | | | 5 | 0 | 72.333 | 0 | 10.939 | 0 | -1981.712 |
| 421 | 3 | M85 | 1 | 0 | 72.333 | 0 | -9.668 | 0 | -1981.719 |
| 422 | | | 2 | 0 | 69.861 | 0 | -9.668 | 0 | -2113.87 |
| 423 | | | 3 | 0 | 67.389 | 0 | -9.668 | 0 | -2241.425 |
| 424 | | | 4 | 0 | 64.917 | 0 | -9.668 | 0 | -2364.386 |
| 425 | | | 5 | 0 | 62.444 | 0 | -9.668 | 0 | -2482.752 |
| 426 | 3 | M86 | 1 | 0 | 58.669 | 0 | 15.463 | 0 | -2482.793 |
| 427 | | | 2 | 0 | 56.197 | 0 | 15.463 | 0 | -2589.547 |
| 428 | | | 3 | 0 | 53.725 | 0 | 15.463 | 0 | -2691.705 |
| 429 | | | 4 | 0 | 51.253 | 0 | 15.463 | 0 | -2789.269 |
| 430 | | | 5 | 0 | 48.781 | 0 | 15.463 | 0 | -2882.238 |
| 431 | 3 | M87 | 1 | 0 | 48.781 | 0 | -14.509 | 0 | -2882.243 |
| 432 | | | 2 | 0 | 46.309 | 0 | -14.509 | 0 | -2970.616 |
| 433 | | | 3 | 0 | 43.837 | 0 | -14.509 | 0 | -3054.394 |
| 434 | | | 4 | 0 | 41.364 | 0 | -14.509 | 0 | -3133.578 |
| 435 | | | 5 | 0 | 38.892 | 0 | -14.509 | 0 | -3208.166 |
| 436 | 3 | M88 | 1 | 0 | 34.059 | 0 | 18.058 | 0 | -3208.19 |
| 437 | | | 2 | 0 | 31.587 | 0 | 18.058 | 0 | -3269.198 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 438 | | | 3 | 0 | 29.114 | 0 | 18.058 | 0 | -3325.612 |
| 439 | | | 4 | 0 | 26.642 | 0 | 18.058 | 0 | -3377.431 |
| 440 | | | 5 | 0 | 24.17 | 0 | 18.058 | 0 | -3424.654 |
| 441 | 3 | M89 | 1 | 0 | 24.17 | 0 | -17.554 | 0 | -3424.657 |
| 442 | | | 2 | 0 | 21.698 | 0 | -17.554 | 0 | -3467.286 |
| 443 | | | 3 | 0 | 19.226 | 0 | -17.554 | 0 | -3505.319 |
| 444 | | | 4 | 0 | 16.754 | 0 | -17.554 | 0 | -3538.757 |
| 445 | | | 5 | 0 | 14.282 | 0 | -17.554 | 0 | -3567.601 |
| 446 | 3 | M90 | 1 | 0 | 9.008 | 0 | 18.697 | 0 | -3567.608 |
| 447 | | | 2 | 0 | 6.536 | 0 | 18.697 | 0 | -3582.055 |
| 448 | | | 3 | 0 | 4.064 | 0 | 18.697 | 0 | -3591.907 |
| 449 | | | 4 | 0 | 1.592 | 0 | 18.697 | 0 | -3597.164 |
| 450 | | | 5 | 0 | -.88 | 0 | 18.697 | 0 | -3597.825 |
| 451 | 3 | M91 | 1 | 0 | -.88 | 0 | -18.716 | 0 | -3597.825 |
| 452 | | | 2 | 0 | -3.352 | 0 | -18.716 | 0 | -3593.892 |
| 453 | | | 3 | 0 | -5.824 | 0 | -18.716 | 0 | -3585.363 |
| 454 | | | 4 | 0 | -8.296 | 0 | -18.716 | 0 | -3572.24 |
| 455 | | | 5 | 0 | -10.769 | 0 | -18.716 | 0 | -3554.521 |
| 456 | 3 | M92 | 1 | 0 | -16.027 | 0 | 17.401 | 0 | -3554.513 |
| 457 | | | 2 | 0 | -18.499 | 0 | 17.401 | 0 | -3522.425 |
| 458 | | | 3 | 0 | -20.972 | 0 | 17.401 | 0 | -3485.741 |
| 459 | | | 4 | 0 | -23.444 | 0 | 17.401 | 0 | -3444.463 |
| 460 | | | 5 | 0 | -25.916 | 0 | 17.401 | 0 | -3398.59 |
| 461 | 3 | M93 | 1 | 0 | -25.916 | 0 | -17.94 | 0 | -3398.587 |
| 462 | | | 2 | 0 | -28.388 | 0 | -17.94 | 0 | -3348.119 |
| 463 | | | 3 | 0 | -30.86 | 0 | -17.94 | 0 | -3293.055 |
| 464 | | | 4 | 0 | -33.332 | 0 | -17.94 | 0 | -3233.397 |
| 465 | | | 5 | 0 | -35.804 | 0 | -17.94 | 0 | -3169.144 |
| 466 | 3 | M94 | 1 | 0 | -40.588 | 0 | 14.226 | 0 | -3169.119 |
| 467 | | | 2 | 0 | -43.06 | 0 | 14.226 | 0 | -3091.379 |
| 468 | | | 3 | 0 | -45.532 | 0 | 14.226 | 0 | -3009.044 |
| 469 | | | 4 | 0 | -48.004 | 0 | 14.226 | 0 | -2922.114 |
| 470 | | | 5 | 0 | -50.476 | 0 | 14.226 | 0 | -2830.589 |
| 471 | 3 | M95 | 1 | 0 | -50.476 | 0 | -15.208 | 0 | -2830.584 |
| 472 | | | 2 | 0 | -52.948 | 0 | -15.208 | 0 | -2734.464 |
| 473 | | | 3 | 0 | -55.421 | 0 | -15.208 | 0 | -2633.749 |
| 474 | | | 4 | 0 | -57.893 | 0 | -15.208 | 0 | -2528.439 |
| 475 | | | 5 | 0 | -60.365 | 0 | -15.208 | 0 | -2418.534 |
| 476 | 3 | M96 | 1 | 0 | -64.029 | 0 | 9.265 | 0 | -2418.491 |
| 477 | | | 2 | 0 | -66.501 | 0 | 9.265 | 0 | -2297.18 |
| 478 | | | 3 | 0 | -68.973 | 0 | 9.265 | 0 | -2171.274 |
| 479 | | | 4 | 0 | -71.445 | 0 | 9.265 | 0 | -2040.774 |
| 480 | | | 5 | 0 | -73.917 | 0 | 9.265 | 0 | -1905.678 |
| 481 | 3 | M97 | 1 | 0 | -73.917 | 0 | -10.552 | 0 | -1905.671 |
| 482 | | | 2 | 0 | -76.389 | 0 | -10.552 | 0 | -1765.98 |
| 483 | | | 3 | 0 | -78.862 | 0 | -10.552 | 0 | -1621.695 |
| 484 | | | 4 | 0 | -81.334 | 0 | -10.552 | 0 | -1472.814 |
| 485 | | | 5 | 0 | -83.806 | 0 | -10.552 | 0 | -1319.338 |
| 486 | 3 | M98 | 1 | 0 | -85.982 | 0 | 2.453 | 0 | -1319.291 |
| 487 | | | 2 | 0 | -87.787 | 0 | 2.453 | 0 | -1201.421 |
| 488 | | | 3 | 0 | -89.591 | 0 | 2.453 | 0 | -1081.103 |
| 489 | | | 4 | 0 | -91.395 | 0 | 2.453 | 0 | -958.338 |
| 490 | | | 5 | 0 | -93.2 | 0 | 2.453 | 0 | -833.124 |
| 491 | 3 | M99 | 1 | 0 | -93.2 | 0 | -3.871 | 0 | -833.119 |
| 492 | | | 2 | 0 | -95.004 | 0 | -3.871 | 0 | -705.458 |
| 493 | | | 3 | 0 | -96.808 | 0 | -3.871 | 0 | -575.349 |
| 494 | | | 4 | 0 | -98.613 | 0 | -3.871 | 0 | -442.792 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 495 | | | 5 | 0 | -100.417 | 0 | -3.871 | 0 | -307.788 |
| 496 | 3 | M100 | 1 | 0 | -101.564 | 0 | 0 | 0 | -307.783 |
| 497 | | | 2 | 0 | -102.552 | 0 | 0 | 0 | -231.939 |
| 498 | | | 3 | 0 | -103.541 | 0 | 0 | 0 | -155.36 |
| 499 | | | 4 | 0 | -104.529 | 0 | 0 | 0 | -78.047 |
| 500 | | | 5 | 0 | -105.518 | 0 | 0 | 0 | 0 |
| 501 | 3 | M101 | 1 | 0 | 103.741 | 0 | 0 | 0 | 0 |
| 502 | | | 2 | 0 | 102.761 | 0 | 0 | 0 | -76.096 |
| 503 | | | 3 | 0 | 101.781 | 0 | 0 | 0 | -151.47 |
| 504 | | | 4 | 0 | 100.801 | 0 | 0 | 0 | -226.122 |
| 505 | | | 5 | 0 | 99.82 | 0 | 0 | 0 | -300.051 |
| 506 | 3 | M102 | 1 | 0 | 98.396 | 0 | 4.262 | 0 | -300.612 |
| 507 | | | 2 | 0 | 96.436 | 0 | 4.262 | 0 | -444.203 |
| 508 | | | 3 | 0 | 94.475 | 0 | 4.262 | 0 | -584.904 |
| 509 | | | 4 | 0 | 92.515 | 0 | 4.262 | 0 | -722.716 |
| 510 | | | 5 | 0 | 90.555 | 0 | 4.262 | 0 | -857.638 |
| 511 | 3 | M103 | 1 | 0 | 90.555 | 0 | -2.872 | 0 | -857.644 |
| 512 | | | 2 | 0 | 88.594 | 0 | -2.872 | 0 | -989.676 |
| 513 | | | 3 | 0 | 86.634 | 0 | -2.872 | 0 | -1118.819 |
| 514 | | | 4 | 0 | 84.673 | 0 | -2.872 | 0 | -1245.073 |
| 515 | | | 5 | 0 | 82.713 | 0 | -2.872 | 0 | -1368.436 |
| 516 | 3 | M104 | 1 | 0 | 79.723 | 0 | 10.608 | 0 | -1369.02 |
| 517 | | | 2 | 0 | 77.273 | 0 | 10.608 | 0 | -1513.652 |
| 518 | | | 3 | 0 | 74.822 | 0 | 10.608 | 0 | -1653.769 |
| 519 | | | 4 | 0 | 72.372 | 0 | 10.608 | 0 | -1789.371 |
| 520 | | | 5 | 0 | 69.921 | 0 | 10.608 | 0 | -1920.458 |
| 521 | 3 | M105 | 1 | 0 | 69.921 | 0 | -9.362 | 0 | -1920.464 |
| 522 | | | 2 | 0 | 67.471 | 0 | -9.362 | 0 | -2047.036 |
| 523 | | | 3 | 0 | 65.02 | 0 | -9.362 | 0 | -2169.092 |
| 524 | | | 4 | 0 | 62.569 | 0 | -9.362 | 0 | -2286.634 |
| 525 | | | 5 | 0 | 60.119 | 0 | -9.362 | 0 | -2399.66 |
| 526 | 3 | M106 | 1 | 0 | 56.276 | 0 | 14.916 | 0 | -2400.054 |
| 527 | | | 2 | 0 | 53.825 | 0 | 14.916 | 0 | -2501.484 |
| 528 | | | 3 | 0 | 51.375 | 0 | 14.916 | 0 | -2598.399 |
| 529 | | | 4 | 0 | 48.924 | 0 | 14.916 | 0 | -2690.799 |
| 530 | | | 5 | 0 | 46.473 | 0 | 14.916 | 0 | -2778.684 |
| 531 | 3 | M107 | 1 | 0 | 46.473 | 0 | -13.979 | 0 | -2778.689 |
| 532 | | | 2 | 0 | 44.023 | 0 | -13.979 | 0 | -2862.058 |
| 533 | | | 3 | 0 | 41.572 | 0 | -13.979 | 0 | -2940.913 |
| 534 | | | 4 | 0 | 39.122 | 0 | -13.979 | 0 | -3015.252 |
| 535 | | | 5 | 0 | 36.671 | 0 | -13.979 | 0 | -3085.077 |
| 536 | 3 | M108 | 1 | 0 | 32.67 | 0 | 17.353 | 0 | -3085.316 |
| 537 | | | 2 | 0 | 30.219 | 0 | 17.353 | 0 | -3143.252 |
| 538 | | | 3 | 0 | 27.769 | 0 | 17.353 | 0 | -3196.674 |
| 539 | | | 4 | 0 | 25.318 | 0 | 17.353 | 0 | -3245.58 |
| 540 | | | 5 | 0 | 22.868 | 0 | 17.353 | 0 | -3289.972 |
| 541 | 3 | M109 | 1 | 0 | 22.868 | 0 | -16.858 | 0 | -3289.974 |
| 542 | | | 2 | 0 | 20.417 | 0 | -16.858 | 0 | -3329.851 |
| 543 | | | 3 | 0 | 17.967 | 0 | -16.858 | 0 | -3365.212 |
| 544 | | | 4 | 0 | 15.516 | 0 | -16.858 | 0 | -3396.058 |
| 545 | | | 5 | 0 | 13.066 | 0 | -16.858 | 0 | -3422.389 |
| 546 | 3 | M110 | 1 | 0 | 8.972 | 0 | 17.941 | 0 | -3422.466 |
| 547 | | | 2 | 0 | 6.521 | 0 | 17.941 | 0 | -3436.739 |
| 548 | | | 3 | 0 | 4.071 | 0 | 17.941 | 0 | -3446.497 |
| 549 | | | 4 | 0 | 1.62 | 0 | 17.941 | 0 | -3451.739 |
| 550 | | | 5 | 0 | -.83 | 0 | 17.941 | 0 | -3452.466 |
| 551 | 3 | M111 | 1 | 0 | -.83 | 0 | -17.96 | 0 | -3452.466 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 552 | | | 2 | 0 | -3.281 | 0 | -17.96 | 0 | -3448.679 |
| 553 | | | 3 | 0 | -5.732 | 0 | -17.96 | 0 | -3440.376 |
| 554 | | | 4 | 0 | -8.182 | 0 | -17.96 | 0 | -3427.558 |
| 555 | | | 5 | 0 | -10.633 | 0 | -17.96 | 0 | -3410.225 |
| 556 | 3 | M112 | 1 | 0 | -14.723 | 0 | 16.714 | 0 | -3410.136 |
| 557 | | | 2 | 0 | -17.173 | 0 | 16.714 | 0 | -3380.752 |
| 558 | | | 3 | 0 | -19.624 | 0 | 16.714 | 0 | -3346.854 |
| 559 | | | 4 | 0 | -22.074 | 0 | 16.714 | 0 | -3308.44 |
| 560 | | | 5 | 0 | -24.525 | 0 | 16.714 | 0 | -3265.511 |
| 561 | 3 | M113 | 1 | 0 | -24.525 | 0 | -17.243 | 0 | -3265.508 |
| 562 | | | 2 | 0 | -26.975 | 0 | -17.243 | 0 | -3218.064 |
| 563 | | | 3 | 0 | -29.426 | 0 | -17.243 | 0 | -3166.105 |
| 564 | | | 4 | 0 | -31.876 | 0 | -17.243 | 0 | -3109.631 |
| 565 | | | 5 | 0 | -34.327 | 0 | -17.243 | 0 | -3048.641 |
| 566 | 3 | M114 | 1 | 0 | -38.317 | 0 | 13.712 | 0 | -3048.391 |
| 567 | | | 2 | 0 | -40.767 | 0 | 13.712 | 0 | -2975.535 |
| 568 | | | 3 | 0 | -43.218 | 0 | 13.712 | 0 | -2898.165 |
| 569 | | | 4 | 0 | -45.668 | 0 | 13.712 | 0 | -2816.279 |
| 570 | | | 5 | 0 | -48.119 | 0 | 13.712 | 0 | -2729.877 |
| 571 | 3 | M115 | 1 | 0 | -48.119 | 0 | -14.675 | 0 | -2729.872 |
| 572 | | | 2 | 0 | -50.569 | 0 | -14.675 | 0 | -2638.956 |
| 573 | | | 3 | 0 | -53.02 | 0 | -14.675 | 0 | -2543.525 |
| 574 | | | 4 | 0 | -55.47 | 0 | -14.675 | 0 | -2443.579 |
| 575 | | | 5 | 0 | -57.921 | 0 | -14.675 | 0 | -2339.118 |
| 576 | 3 | M116 | 1 | 0 | -61.739 | 0 | 8.975 | 0 | -2338.713 |
| 577 | | | 2 | 0 | -64.19 | 0 | 8.975 | 0 | -2222.701 |
| 578 | | | 3 | 0 | -66.64 | 0 | 8.975 | 0 | -2102.174 |
| 579 | | | 4 | 0 | -69.091 | 0 | 8.975 | 0 | -1977.131 |
| 580 | | | 5 | 0 | -71.541 | 0 | 8.975 | 0 | -1847.574 |
| 581 | 3 | M117 | 1 | 0 | -71.541 | 0 | -10.237 | 0 | -1847.568 |
| 582 | | | 2 | 0 | -73.992 | 0 | -10.237 | 0 | -1713.496 |
| 583 | | | 3 | 0 | -76.442 | 0 | -10.237 | 0 | -1574.908 |
| 584 | | | 4 | 0 | -78.893 | 0 | -10.237 | 0 | -1431.806 |
| 585 | | | 5 | 0 | -81.343 | 0 | -10.237 | 0 | -1284.189 |
| 586 | 3 | M118 | 1 | 0 | -84.217 | 0 | 2.382 | 0 | -1283.59 |
| 587 | | | 2 | 0 | -86.005 | 0 | 2.382 | 0 | -1169.136 |
| 588 | | | 3 | 0 | -87.794 | 0 | 2.382 | 0 | -1052.276 |
| 589 | | | 4 | 0 | -89.582 | 0 | 2.382 | 0 | -933.011 |
| 590 | | | 5 | 0 | -91.371 | 0 | 2.382 | 0 | -811.341 |
| 591 | 3 | M119 | 1 | 0 | -91.371 | 0 | -3.776 | 0 | -811.336 |
| 592 | | | 2 | 0 | -93.159 | 0 | -3.776 | 0 | -687.261 |
| 593 | | | 3 | 0 | -94.948 | 0 | -3.776 | 0 | -560.781 |
| 594 | | | 4 | 0 | -96.736 | 0 | -3.776 | 0 | -431.895 |
| 595 | | | 5 | 0 | -98.525 | 0 | -3.776 | 0 | -300.605 |
| 596 | 3 | M120 | 1 | 0 | -99.873 | 0 | 0 | 0 | -300.06 |
| 597 | | | 2 | 0 | -100.853 | 0 | 0 | 0 | -226.128 |
| 598 | | | 3 | 0 | -101.833 | 0 | 0 | 0 | -151.473 |
| 599 | | | 4 | 0 | -102.813 | 0 | 0 | 0 | -76.098 |
| 600 | | | 5 | 0 | -103.792 | 0 | 0 | 0 | 0 |
| 601 | 3 | M121 | 1 | 0 | 73.333 | 0 | 0 | 0 | 0 |
| 602 | | | 2 | 0 | 72.42 | 0 | 0 | 0 | -53.237 |
| 603 | | | 3 | 0 | 71.507 | 0 | 0 | 0 | -105.806 |
| 604 | | | 4 | 0 | 70.594 | 0 | 0 | 0 | -157.709 |
| 605 | | | 5 | 0 | 69.681 | 0 | 0 | 0 | -208.944 |
| 606 | 3 | M122 | 1 | 0 | 69.144 | 0 | 2.685 | 0 | -208.338 |
| 607 | | | 2 | 0 | 67.318 | 0 | 2.685 | 0 | -308.023 |
| 608 | | | 3 | 0 | 65.491 | 0 | 2.685 | 0 | -405.04 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 609 | | | 4 | 0 | 63.665 | 0 | 2.685 | 0 | -499.388 |
| 610 | | | 5 | 0 | 61.839 | 0 | 2.685 | 0 | -591.069 |
| 611 | 3 | M123 | 1 | 0 | 61.839 | 0 | -2.232 | 0 | -591.071 |
| 612 | | | 2 | 0 | 60.013 | 0 | -2.232 | 0 | -680.083 |
| 613 | | | 3 | 0 | 58.186 | 0 | -2.232 | 0 | -766.428 |
| 614 | | | 4 | 0 | 56.36 | 0 | -2.232 | 0 | -850.104 |
| 615 | | | 5 | 0 | 54.534 | 0 | -2.232 | 0 | -931.112 |
| 616 | 3 | M124 | 1 | 0 | 55.631 | 0 | 6.98 | 0 | -930.559 |
| 617 | | | 2 | 0 | 53.348 | 0 | 6.98 | 0 | -1030.07 |
| 618 | | | 3 | 0 | 51.065 | 0 | 6.98 | 0 | -1125.413 |
| 619 | | | 4 | 0 | 48.782 | 0 | 6.98 | 0 | -1216.586 |
| 620 | | | 5 | 0 | 46.499 | 0 | 6.98 | 0 | -1303.59 |
| 621 | 3 | M125 | 1 | 0 | 46.499 | 0 | -6.576 | 0 | -1303.592 |
| 622 | | | 2 | 0 | 44.217 | 0 | -6.576 | 0 | -1386.427 |
| 623 | | | 3 | 0 | 41.934 | 0 | -6.576 | 0 | -1465.093 |
| 624 | | | 4 | 0 | 39.651 | 0 | -6.576 | 0 | -1539.59 |
| 625 | | | 5 | 0 | 37.368 | 0 | -6.576 | 0 | -1609.918 |
| 626 | 3 | M126 | 1 | 0 | 39.734 | 0 | 9.855 | 0 | -1609.57 |
| 627 | | | 2 | 0 | 37.451 | 0 | 9.855 | 0 | -1680.05 |
| 628 | | | 3 | 0 | 35.169 | 0 | 9.855 | 0 | -1746.361 |
| 629 | | | 4 | 0 | 32.886 | 0 | 9.855 | 0 | -1808.503 |
| 630 | | | 5 | 0 | 30.603 | 0 | 9.855 | 0 | -1866.477 |
| 631 | 3 | M127 | 1 | 0 | 30.603 | 0 | -9.553 | 0 | -1866.478 |
| 632 | | | 2 | 0 | 28.32 | 0 | -9.553 | 0 | -1920.282 |
| 633 | | | 3 | 0 | 26.037 | 0 | -9.553 | 0 | -1969.917 |
| 634 | | | 4 | 0 | 23.755 | 0 | -9.553 | 0 | -2015.384 |
| 635 | | | 5 | 0 | 21.472 | 0 | -9.553 | 0 | -2056.681 |
| 636 | 3 | M128 | 1 | 0 | 24.116 | 0 | 11.515 | 0 | -2056.491 |
| 637 | | | 2 | 0 | 21.834 | 0 | 11.515 | 0 | -2098.449 |
| 638 | | | 3 | 0 | 19.551 | 0 | 11.515 | 0 | -2136.238 |
| 639 | | | 4 | 0 | 17.268 | 0 | 11.515 | 0 | -2169.859 |
| 640 | | | 5 | 0 | 14.985 | 0 | 11.515 | 0 | -2199.31 |
| 641 | 3 | M129 | 1 | 0 | 14.985 | 0 | -11.356 | 0 | -2199.311 |
| 642 | | | 2 | 0 | 12.702 | 0 | -11.356 | 0 | -2224.593 |
| 643 | | | 3 | 0 | 10.42 | 0 | -11.356 | 0 | -2245.706 |
| 644 | | | 4 | 0 | 8.137 | 0 | -11.356 | 0 | -2262.651 |
| 645 | | | 5 | 0 | 5.854 | 0 | -11.356 | 0 | -2275.426 |
| 646 | 3 | M130 | 1 | 0 | 8.589 | 0 | 11.98 | 0 | -2275.368 |
| 647 | | | 2 | 0 | 6.306 | 0 | 11.98 | 0 | -2288.97 |
| 648 | | | 3 | 0 | 4.024 | 0 | 11.98 | 0 | -2298.403 |
| 649 | | | 4 | 0 | 1.741 | 0 | 11.98 | 0 | -2303.666 |
| 650 | | | 5 | 0 | -.542 | 0 | 11.98 | 0 | -2304.761 |
| 651 | 3 | M131 | 1 | 0 | -.542 | 0 | -11.986 | 0 | -2304.761 |
| 652 | | | 2 | 0 | -2.825 | 0 | -11.986 | 0 | -2301.687 |
| 653 | | | 3 | 0 | -5.108 | 0 | -11.986 | 0 | -2294.443 |
| 654 | | | 4 | 0 | -7.39 | 0 | -11.986 | 0 | -2283.031 |
| 655 | | | 5 | 0 | -9.673 | 0 | -11.986 | 0 | -2267.45 |
| 656 | 3 | M132 | 1 | 0 | -6.941 | 0 | 11.267 | 0 | -2267.516 |
| 657 | | | 2 | 0 | -9.224 | 0 | 11.267 | 0 | -2252.756 |
| 658 | | | 3 | 0 | -11.507 | 0 | 11.267 | 0 | -2233.826 |
| 659 | | | 4 | 0 | -13.789 | 0 | 11.267 | 0 | -2210.728 |
| 660 | | | 5 | 0 | -16.072 | 0 | 11.267 | 0 | -2183.46 |
| 661 | 3 | M133 | 1 | 0 | -16.072 | 0 | -11.438 | 0 | -2183.459 |
| 662 | | | 2 | 0 | -18.355 | 0 | -11.438 | 0 | -2152.023 |
| 663 | | | 3 | 0 | -20.638 | 0 | -11.438 | 0 | -2116.417 |
| 664 | | | 4 | 0 | -22.921 | 0 | -11.438 | 0 | -2076.643 |
| 665 | | | 5 | 0 | -25.204 | 0 | -11.438 | 0 | -2032.7 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 666 | 3 | M134 | 1 | 0 | -22.57 | 0 | 9.384 | 0 | -2032.899 |
| 667 | | | 2 | 0 | -24.853 | 0 | 9.384 | 0 | -1989.596 |
| 668 | | | 3 | 0 | -27.136 | 0 | 9.384 | 0 | -1942.123 |
| 669 | | | 4 | 0 | -29.419 | 0 | 9.384 | 0 | -1890.481 |
| 670 | | | 5 | 0 | -31.702 | 0 | 9.384 | 0 | -1834.671 |
| 671 | 3 | M135 | 1 | 0 | -31.702 | 0 | -9.694 | 0 | -1834.669 |
| 672 | | | 2 | 0 | -33.984 | 0 | -9.694 | 0 | -1774.69 |
| 673 | | | 3 | 0 | -36.267 | 0 | -9.694 | 0 | -1710.541 |
| 674 | | | 4 | 0 | -38.55 | 0 | -9.694 | 0 | -1642.224 |
| 675 | | | 5 | 0 | -40.833 | 0 | -9.694 | 0 | -1569.738 |
| 676 | 3 | M136 | 1 | 0 | -38.499 | 0 | 6.323 | 0 | -1570.098 |
| 677 | | | 2 | 0 | -40.782 | 0 | 6.323 | 0 | -1497.705 |
| 678 | | | 3 | 0 | -43.064 | 0 | 6.323 | 0 | -1421.144 |
| 679 | | | 4 | 0 | -45.347 | 0 | 6.323 | 0 | -1340.413 |
| 680 | | | 5 | 0 | -47.63 | 0 | 6.323 | 0 | -1255.513 |
| 681 | 3 | M137 | 1 | 0 | -47.63 | 0 | -6.733 | 0 | -1255.511 |
| 682 | | | 2 | 0 | -49.913 | 0 | -6.733 | 0 | -1166.442 |
| 683 | | | 3 | 0 | -52.196 | 0 | -6.733 | 0 | -1073.204 |
| 684 | | | 4 | 0 | -54.478 | 0 | -6.733 | 0 | -975.798 |
| 685 | | | 5 | 0 | -56.761 | 0 | -6.733 | 0 | -874.222 |
| 686 | 3 | M138 | 1 | 0 | -55.815 | 0 | 1.895 | 0 | -874.79 |
| 687 | | | 2 | 0 | -57.481 | 0 | 1.895 | 0 | -799.283 |
| 688 | | | 3 | 0 | -59.148 | 0 | 1.895 | 0 | -721.555 |
| 689 | | | 4 | 0 | -60.814 | 0 | 1.895 | 0 | -641.606 |
| 690 | | | 5 | 0 | -62.48 | 0 | 1.895 | 0 | -559.436 |
| 691 | 3 | M139 | 1 | 0 | -62.48 | 0 | -2.35 | 0 | -559.434 |
| 692 | | | 2 | 0 | -64.146 | 0 | -2.35 | 0 | -475.044 |
| 693 | | | 3 | 0 | -65.812 | 0 | -2.35 | 0 | -388.433 |
| 694 | | | 4 | 0 | -67.478 | 0 | -2.35 | 0 | -299.601 |
| 695 | | | 5 | 0 | -69.144 | 0 | -2.35 | 0 | -208.548 |
| 696 | 3 | M140 | 1 | 0 | -69.785 | 0 | 0 | 0 | -209.145 |
| 697 | | | 2 | 0 | -70.697 | 0 | 0 | 0 | -157.859 |
| 698 | | | 3 | 0 | -71.61 | 0 | 0 | 0 | -105.905 |
| 699 | | | 4 | 0 | -72.523 | 0 | 0 | 0 | -53.286 |
| 700 | | | 5 | 0 | -73.436 | 0 | 0 | 0 | 0 |
| 701 | 3 | M141 | 1 | 0 | 71.543 | 0 | 0 | 0 | 0 |
| 702 | | | 2 | 0 | 70.638 | 0 | 0 | 0 | -51.47 |
| 703 | | | 3 | 0 | 69.733 | 0 | 0 | 0 | -102.284 |
| 704 | | | 4 | 0 | 68.828 | 0 | 0 | 0 | -152.443 |
| 705 | | | 5 | 0 | 67.923 | 0 | 0 | 0 | -201.947 |
| 706 | 3 | M142 | 1 | 0 | 67.309 | 0 | 2.61 | 0 | -201.725 |
| 707 | | | 2 | 0 | 65.499 | 0 | 2.61 | 0 | -297.877 |
| 708 | | | 3 | 0 | 63.689 | 0 | 2.61 | 0 | -391.409 |
| 709 | | | 4 | 0 | 61.879 | 0 | 2.61 | 0 | -482.32 |
| 710 | | | 5 | 0 | 60.069 | 0 | 2.61 | 0 | -570.61 |
| 711 | 3 | M143 | 1 | 0 | 60.069 | 0 | -2.137 | 0 | -570.611 |
| 712 | | | 2 | 0 | 58.259 | 0 | -2.137 | 0 | -656.281 |
| 713 | | | 3 | 0 | 56.449 | 0 | -2.137 | 0 | -739.329 |
| 714 | | | 4 | 0 | 54.639 | 0 | -2.137 | 0 | -819.756 |
| 715 | | | 5 | 0 | 52.829 | 0 | -2.137 | 0 | -897.563 |
| 716 | 3 | M144 | 1 | 0 | 53.799 | 0 | 6.729 | 0 | -897.399 |
| 717 | | | 2 | 0 | 51.536 | 0 | 6.729 | 0 | -992.727 |
| 718 | | | 3 | 0 | 49.274 | 0 | 6.729 | 0 | -1083.96 |
| 719 | | | 4 | 0 | 47.011 | 0 | 6.729 | 0 | -1171.097 |
| 720 | | | 5 | 0 | 44.749 | 0 | 6.729 | 0 | -1254.14 |
| 721 | 3 | M145 | 1 | 0 | 44.749 | 0 | -6.313 | 0 | -1254.142 |
| 722 | | | 2 | 0 | 42.486 | 0 | -6.313 | 0 | -1333.089 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 723 | | | 3 | 0 | 40.224 | 0 | -6.313 | 0 | -1407.941 |
| 724 | | | 4 | 0 | 37.961 | 0 | -6.313 | 0 | -1478.698 |
| 725 | | | 5 | 0 | 35.699 | 0 | -6.313 | 0 | -1545.36 |
| 726 | 3 | M146 | 1 | 0 | 38.121 | 0 | 9.452 | 0 | -1545.265 |
| 727 | | | 2 | 0 | 35.859 | 0 | 9.452 | 0 | -1612.217 |
| 728 | | | 3 | 0 | 33.596 | 0 | 9.452 | 0 | -1675.074 |
| 729 | | | 4 | 0 | 31.334 | 0 | 9.452 | 0 | -1733.835 |
| 730 | | | 5 | 0 | 29.071 | 0 | 9.452 | 0 | -1788.502 |
| 731 | 3 | M147 | 1 | 0 | 29.071 | 0 | -9.146 | 0 | -1788.503 |
| 732 | | | 2 | 0 | 26.809 | 0 | -9.146 | 0 | -1839.075 |
| 733 | | | 3 | 0 | 24.546 | 0 | -9.146 | 0 | -1885.551 |
| 734 | | | 4 | 0 | 22.284 | 0 | -9.146 | 0 | -1927.932 |
| 735 | | | 5 | 0 | 20.021 | 0 | -9.146 | 0 | -1966.218 |
| 736 | 3 | M148 | 1 | 0 | 23.199 | 0 | 11.006 | 0 | -1966.18 |
| 737 | | | 2 | 0 | 20.936 | 0 | 11.006 | 0 | -2006.123 |
| 738 | | | 3 | 0 | 18.674 | 0 | 11.006 | 0 | -2041.97 |
| 739 | | | 4 | 0 | 16.411 | 0 | 11.006 | 0 | -2073.722 |
| 740 | | | 5 | 0 | 14.149 | 0 | 11.006 | 0 | -2101.38 |
| 741 | 3 | M149 | 1 | 0 | 14.149 | 0 | -10.846 | 0 | -2101.38 |
| 742 | | | 2 | 0 | 11.886 | 0 | -10.846 | 0 | -2124.942 |
| 743 | | | 3 | 0 | 9.624 | 0 | -10.846 | 0 | -2144.409 |
| 744 | | | 4 | 0 | 7.361 | 0 | -10.846 | 0 | -2159.781 |
| 745 | | | 5 | 0 | 5.099 | 0 | -10.846 | 0 | -2171.057 |
| 746 | 3 | M150 | 1 | 0 | 8.54 | 0 | 11.436 | 0 | -2171.049 |
| 747 | | | 2 | 0 | 6.278 | 0 | 11.436 | 0 | -2184.459 |
| 748 | | | 3 | 0 | 4.015 | 0 | 11.436 | 0 | -2193.775 |
| 749 | | | 4 | 0 | 1.753 | 0 | 11.436 | 0 | -2198.995 |
| 750 | | | 5 | 0 | -.51 | 0 | 11.436 | 0 | -2200.12 |
| 751 | 3 | M151 | 1 | 0 | -.51 | 0 | -11.442 | 0 | -2200.12 |
| 752 | | | 2 | 0 | -2.772 | 0 | -11.442 | 0 | -2197.15 |
| 753 | | | 3 | 0 | -5.035 | 0 | -11.442 | 0 | -2190.085 |
| 754 | | | 4 | 0 | -7.297 | 0 | -11.442 | 0 | -2178.925 |
| 755 | | | 5 | 0 | -9.56 | 0 | -11.442 | 0 | -2163.67 |
| 756 | 3 | M152 | 1 | 0 | -6.126 | 0 | 10.763 | 0 | -2163.68 |
| 757 | | | 2 | 0 | -8.389 | 0 | 10.763 | 0 | -2150.544 |
| 758 | | | 3 | 0 | -10.651 | 0 | 10.763 | 0 | -2133.314 |
| 759 | | | 4 | 0 | -12.914 | 0 | 10.763 | 0 | -2111.988 |
| 760 | | | 5 | 0 | -15.176 | 0 | 10.763 | 0 | -2086.567 |
| 761 | 3 | M153 | 1 | 0 | -15.176 | 0 | -10.934 | 0 | -2086.566 |
| 762 | | | 2 | 0 | -17.439 | 0 | -10.934 | 0 | -2057.05 |
| 763 | | | 3 | 0 | -19.701 | 0 | -10.934 | 0 | -2023.438 |
| 764 | | | 4 | 0 | -21.964 | 0 | -10.934 | 0 | -1985.732 |
| 765 | | | 5 | 0 | -24.226 | 0 | -10.934 | 0 | -1943.931 |
| 766 | 3 | M154 | 1 | 0 | -21.081 | 0 | 8.986 | 0 | -1943.971 |
| 767 | | | 2 | 0 | -23.344 | 0 | 8.986 | 0 | -1903.767 |
| 768 | | | 3 | 0 | -25.606 | 0 | 8.986 | 0 | -1859.467 |
| 769 | | | 4 | 0 | -27.869 | 0 | 8.986 | 0 | -1811.072 |
| 770 | | | 5 | 0 | -30.131 | 0 | 8.986 | 0 | -1758.582 |
| 771 | 3 | M155 | 1 | 0 | -30.131 | 0 | -9.301 | 0 | -1758.581 |
| 772 | | | 2 | 0 | -32.394 | 0 | -9.301 | 0 | -1701.996 |
| 773 | | | 3 | 0 | -34.656 | 0 | -9.301 | 0 | -1641.316 |
| 774 | | | 4 | 0 | -36.919 | 0 | -9.301 | 0 | -1576.541 |
| 775 | | | 5 | 0 | -39.181 | 0 | -9.301 | 0 | -1507.67 |
| 776 | 3 | M156 | 1 | 0 | -36.846 | 0 | 6.071 | 0 | -1507.771 |
| 777 | | | 2 | 0 | -39.108 | 0 | 6.071 | 0 | -1439.033 |
| 778 | | | 3 | 0 | -41.371 | 0 | 6.071 | 0 | -1366.2 |
| 779 | | | 4 | 0 | -43.633 | 0 | 6.071 | 0 | -1289.271 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 780 | | | 5 | 0 | -45.896 | 0 | 6.071 | 0 | -1208.248 |
| 781 | 3 | M157 | 1 | 0 | -45.896 | 0 | -6.493 | 0 | -1208.245 |
| 782 | | | 2 | 0 | -48.158 | 0 | -6.493 | 0 | -1123.127 |
| 783 | | | 3 | 0 | -50.421 | 0 | -6.493 | 0 | -1033.913 |
| 784 | | | 4 | 0 | -52.683 | 0 | -6.493 | 0 | -940.604 |
| 785 | | | 5 | 0 | -54.946 | 0 | -6.493 | 0 | -843.2 |
| 786 | 3 | M158 | 1 | 0 | -54.117 | 0 | 1.812 | 0 | -843.367 |
| 787 | | | 2 | 0 | -55.768 | 0 | 1.812 | 0 | -770.786 |
| 788 | | | 3 | 0 | -57.419 | 0 | 1.812 | 0 | -696.022 |
| 789 | | | 4 | 0 | -59.071 | 0 | 1.812 | 0 | -619.078 |
| 790 | | | 5 | 0 | -60.722 | 0 | 1.812 | 0 | -539.951 |
| 791 | 3 | M159 | 1 | 0 | -60.722 | 0 | -2.286 | 0 | -539.949 |
| 792 | | | 2 | 0 | -62.373 | 0 | -2.286 | 0 | -458.642 |
| 793 | | | 3 | 0 | -64.025 | 0 | -2.286 | 0 | -375.153 |
| 794 | | | 4 | 0 | -65.676 | 0 | -2.286 | 0 | -289.482 |
| 795 | | | 5 | 0 | -67.327 | 0 | -2.286 | 0 | -201.63 |
| 796 | 3 | M160 | 1 | 0 | -67.925 | 0 | 0 | 0 | -201.853 |
| 797 | | | 2 | 0 | -68.829 | 0 | 0 | 0 | -152.372 |
| 798 | | | 3 | 0 | -69.734 | 0 | 0 | 0 | -102.236 |
| 799 | | | 4 | 0 | -70.639 | 0 | 0 | 0 | -51.445 |
| 800 | | | 5 | 0 | -71.543 | 0 | 0 | 0 | 0 |
| 801 | 3 | M161 | 1 | 0 | 69.039 | 0 | 0 | 0 | 0 |
| 802 | | | 2 | 0 | 68.142 | 0 | 0 | 0 | -49.214 |
| 803 | | | 3 | 0 | 67.245 | 0 | 0 | 0 | -97.784 |
| 804 | | | 4 | 0 | 66.348 | 0 | 0 | 0 | -145.711 |
| 805 | | | 5 | 0 | 65.451 | 0 | 0 | 0 | -192.994 |
| 806 | 3 | M162 | 1 | 0 | 64.995 | 0 | 2.517 | 0 | -192.769 |
| 807 | | | 2 | 0 | 63.201 | 0 | 2.517 | 0 | -284.75 |
| 808 | | | 3 | 0 | 61.407 | 0 | 2.517 | 0 | -374.157 |
| 809 | | | 4 | 0 | 59.614 | 0 | 2.517 | 0 | -460.989 |
| 810 | | | 5 | 0 | 57.82 | 0 | 2.517 | 0 | -545.248 |
| 811 | 3 | M163 | 1 | 0 | 57.82 | 0 | -2.019 | 0 | -545.25 |
| 812 | | | 2 | 0 | 56.026 | 0 | -2.019 | 0 | -626.935 |
| 813 | | | 3 | 0 | 54.232 | 0 | -2.019 | 0 | -706.045 |
| 814 | | | 4 | 0 | 52.439 | 0 | -2.019 | 0 | -782.582 |
| 815 | | | 5 | 0 | 50.645 | 0 | -2.019 | 0 | -856.544 |
| 816 | 3 | M164 | 1 | 0 | 51.896 | 0 | 6.438 | 0 | -856.376 |
| 817 | | | 2 | 0 | 49.654 | 0 | 6.438 | 0 | -947.453 |
| 818 | | | 3 | 0 | 47.411 | 0 | 6.438 | 0 | -1034.508 |
| 819 | | | 4 | 0 | 45.169 | 0 | 6.438 | 0 | -1117.542 |
| 820 | | | 5 | 0 | 42.927 | 0 | 6.438 | 0 | -1196.553 |
| 821 | 3 | M165 | 1 | 0 | 42.927 | 0 | -6.004 | 0 | -1196.555 |
| 822 | | | 2 | 0 | 40.685 | 0 | -6.004 | 0 | -1271.545 |
| 823 | | | 3 | 0 | 38.443 | 0 | -6.004 | 0 | -1342.512 |
| 824 | | | 4 | 0 | 36.2 | 0 | -6.004 | 0 | -1409.458 |
| 825 | | | 5 | 0 | 33.958 | 0 | -6.004 | 0 | -1472.381 |
| 826 | 3 | M166 | 1 | 0 | 36.67 | 0 | 9.014 | 0 | -1472.27 |
| 827 | | | 2 | 0 | 34.428 | 0 | 9.014 | 0 | -1536.037 |
| 828 | | | 3 | 0 | 32.186 | 0 | 9.014 | 0 | -1595.782 |
| 829 | | | 4 | 0 | 29.944 | 0 | 9.014 | 0 | -1651.505 |
| 830 | | | 5 | 0 | 27.702 | 0 | 9.014 | 0 | -1703.206 |
| 831 | 3 | M167 | 1 | 0 | 27.702 | 0 | -8.698 | 0 | -1703.207 |
| 832 | | | 2 | 0 | 25.459 | 0 | -8.698 | 0 | -1750.886 |
| 833 | | | 3 | 0 | 23.217 | 0 | -8.698 | 0 | -1794.543 |
| 834 | | | 4 | 0 | 20.975 | 0 | -8.698 | 0 | -1834.178 |
| 835 | | | 5 | 0 | 18.733 | 0 | -8.698 | 0 | -1869.791 |
| 836 | 3 | M168 | 1 | 0 | 22.368 | 0 | 10.471 | 0 | -1869.736 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 837 | | | 2 | 0 | 20.126 | 0 | 10.471 | 0 | -1907.848 |
| 838 | | | 3 | 0 | 17.884 | 0 | 10.471 | 0 | -1941.938 |
| 839 | | | 4 | 0 | 15.642 | 0 | 10.471 | 0 | -1972.007 |
| 840 | | | 5 | 0 | 13.4 | 0 | 10.471 | 0 | -1998.053 |
| 841 | 3 | M169 | 1 | 0 | 13.4 | 0 | -10.307 | 0 | -1998.054 |
| 842 | | | 2 | 0 | 11.157 | 0 | -10.307 | 0 | -2020.078 |
| 843 | | | 3 | 0 | 8.915 | 0 | -10.307 | 0 | -2038.081 |
| 844 | | | 4 | 0 | 6.673 | 0 | -10.307 | 0 | -2052.061 |
| 845 | | | 5 | 0 | 4.431 | 0 | -10.307 | 0 | -2062.02 |
| 846 | 3 | M170 | 1 | 0 | 8.488 | 0 | 10.867 | 0 | -2062.004 |
| 847 | | | 2 | 0 | 6.246 | 0 | 10.867 | 0 | -2075.218 |
| 848 | | | 3 | 0 | 4.003 | 0 | 10.867 | 0 | -2084.411 |
| 849 | | | 4 | 0 | 1.761 | 0 | 10.867 | 0 | -2089.581 |
| 850 | | | 5 | 0 | -.481 | 0 | 10.867 | 0 | -2090.729 |
| 851 | 3 | M171 | 1 | 0 | -.481 | 0 | -10.874 | 0 | -2090.729 |
| 852 | | | 2 | 0 | -2.723 | 0 | -10.874 | 0 | -2087.856 |
| 853 | | | 3 | 0 | -4.965 | 0 | -10.874 | 0 | -2080.96 |
| 854 | | | 4 | 0 | -7.207 | 0 | -10.874 | 0 | -2070.043 |
| 855 | | | 5 | 0 | -9.45 | 0 | -10.874 | 0 | -2055.103 |
| 856 | 3 | M172 | 1 | 0 | -5.406 | 0 | 10.229 | 0 | -2055.122 |
| 857 | | | 2 | 0 | -7.649 | 0 | 10.229 | 0 | -2043.413 |
| 858 | | | 3 | 0 | -9.891 | 0 | 10.229 | 0 | -2027.682 |
| 859 | | | 4 | 0 | -12.133 | 0 | 10.229 | 0 | -2007.929 |
| 860 | | | 5 | 0 | -14.375 | 0 | 10.229 | 0 | -1984.155 |
| 861 | 3 | M173 | 1 | 0 | -14.375 | 0 | -10.404 | 0 | -1984.154 |
| 862 | | | 2 | 0 | -16.617 | 0 | -10.404 | 0 | -1956.357 |
| 863 | | | 3 | 0 | -18.86 | 0 | -10.404 | 0 | -1924.539 |
| 864 | | | 4 | 0 | -21.102 | 0 | -10.404 | 0 | -1888.698 |
| 865 | | | 5 | 0 | -23.344 | 0 | -10.404 | 0 | -1848.836 |
| 866 | 3 | M174 | 1 | 0 | -19.755 | 0 | 8.546 | 0 | -1848.895 |
| 867 | | | 2 | 0 | -21.998 | 0 | 8.546 | 0 | -1811.448 |
| 868 | | | 3 | 0 | -24.24 | 0 | 8.546 | 0 | -1769.978 |
| 869 | | | 4 | 0 | -26.482 | 0 | 8.546 | 0 | -1724.487 |
| 870 | | | 5 | 0 | -28.724 | 0 | 8.546 | 0 | -1674.974 |
| 871 | 3 | M175 | 1 | 0 | -28.724 | 0 | -8.872 | 0 | -1674.973 |
| 872 | | | 2 | 0 | -30.966 | 0 | -8.872 | 0 | -1621.438 |
| 873 | | | 3 | 0 | -33.208 | 0 | -8.872 | 0 | -1563.881 |
| 874 | | | 4 | 0 | -35.451 | 0 | -8.872 | 0 | -1502.303 |
| 875 | | | 5 | 0 | -37.693 | 0 | -8.872 | 0 | -1436.702 |
| 876 | 3 | M176 | 1 | 0 | -35.075 | 0 | 5.775 | 0 | -1436.818 |
| 877 | | | 2 | 0 | -37.317 | 0 | 5.775 | 0 | -1371.891 |
| 878 | | | 3 | 0 | -39.559 | 0 | 5.775 | 0 | -1302.942 |
| 879 | | | 4 | 0 | -41.802 | 0 | 5.775 | 0 | -1229.971 |
| 880 | | | 5 | 0 | -44.044 | 0 | 5.775 | 0 | -1152.978 |
| 881 | 3 | M177 | 1 | 0 | -44.044 | 0 | -6.215 | 0 | -1152.976 |
| 882 | | | 2 | 0 | -46.286 | 0 | -6.215 | 0 | -1071.961 |
| 883 | | | 3 | 0 | -48.528 | 0 | -6.215 | 0 | -986.925 |
| 884 | | | 4 | 0 | -50.77 | 0 | -6.215 | 0 | -897.866 |
| 885 | | | 5 | 0 | -53.013 | 0 | -6.215 | 0 | -804.786 |
| 886 | 3 | M178 | 1 | 0 | -51.912 | 0 | 1.708 | 0 | -804.958 |
| 887 | | | 2 | 0 | -53.549 | 0 | 1.708 | 0 | -735.923 |
| 888 | | | 3 | 0 | -55.185 | 0 | 1.708 | 0 | -664.746 |
| 889 | | | 4 | 0 | -56.822 | 0 | 1.708 | 0 | -591.426 |
| 890 | | | 5 | 0 | -58.458 | 0 | 1.708 | 0 | -515.964 |
| 891 | 3 | M179 | 1 | 0 | -58.458 | 0 | -2.208 | 0 | -515.962 |
| 892 | | | 2 | 0 | -60.095 | 0 | -2.208 | 0 | -438.357 |
| 893 | | | 3 | 0 | -61.731 | 0 | -2.208 | 0 | -358.61 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 894 | | | 4 | 0 | -63.368 | 0 | -2.208 | 0 | -276.721 |
| 895 | | | 5 | 0 | -65.004 | 0 | -2.208 | 0 | -192.689 |
| 896 | 3 | M180 | 1 | 0 | -65.456 | 0 | 0 | 0 | -192.913 |
| 897 | | | 2 | 0 | -66.352 | 0 | 0 | 0 | -145.649 |
| 898 | | | 3 | 0 | -67.249 | 0 | 0 | 0 | -97.742 |
| 899 | | | 4 | 0 | -68.145 | 0 | 0 | 0 | -49.193 |
| 900 | | | 5 | 0 | -69.042 | 0 | 0 | 0 | 0 |
| 901 | 3 | M181 | 1 | 0 | 64.427 | 0 | 0 | 0 | 0 |
| 902 | | | 2 | 0 | 63.638 | 0 | 0 | 0 | -45.528 |
| 903 | | | 3 | 0 | 62.849 | 0 | 0 | 0 | -90.494 |
| 904 | | | 4 | 0 | 62.06 | 0 | 0 | 0 | -134.9 |
| 905 | | | 5 | 0 | 61.27 | 0 | 0 | 0 | -178.744 |
| 906 | 3 | M182 | 1 | 0 | 60.903 | 0 | 2.387 | 0 | -183.427 |
| 907 | | | 2 | 0 | 59.325 | 0 | 2.387 | 0 | -268.909 |
| 908 | | | 3 | 0 | 57.746 | 0 | 2.387 | 0 | -352.147 |
| 909 | | | 4 | 0 | 56.168 | 0 | 2.387 | 0 | -433.14 |
| 910 | | | 5 | 0 | 54.59 | 0 | 2.387 | 0 | -511.889 |
| 911 | 3 | M183 | 1 | 0 | 54.59 | 0 | -1.871 | 0 | -511.891 |
| 912 | | | 2 | 0 | 53.011 | 0 | -1.871 | 0 | -588.396 |
| 913 | | | 3 | 0 | 51.433 | 0 | -1.871 | 0 | -662.656 |
| 914 | | | 4 | 0 | 49.854 | 0 | -1.871 | 0 | -734.671 |
| 915 | | | 5 | 0 | 48.276 | 0 | -1.871 | 0 | -804.442 |
| 916 | 3 | M184 | 1 | 0 | 48.412 | 0 | 6.073 | 0 | -808.827 |
| 917 | | | 2 | 0 | 46.439 | 0 | 6.073 | 0 | -893.125 |
| 918 | | | 3 | 0 | 44.466 | 0 | 6.073 | 0 | -973.917 |
| 919 | | | 4 | 0 | 42.493 | 0 | 6.073 | 0 | -1051.201 |
| 920 | | | 5 | 0 | 40.52 | 0 | 6.073 | 0 | -1124.979 |
| 921 | 3 | M185 | 1 | 0 | 40.52 | 0 | -5.625 | 0 | -1124.981 |
| 922 | | | 2 | 0 | 38.547 | 0 | -5.625 | 0 | -1195.251 |
| 923 | | | 3 | 0 | 36.574 | 0 | -5.625 | 0 | -1262.014 |
| 924 | | | 4 | 0 | 34.601 | 0 | -5.625 | 0 | -1325.27 |
| 925 | | | 5 | 0 | 32.627 | 0 | -5.625 | 0 | -1385.019 |
| 926 | 3 | M186 | 1 | 0 | 33.933 | 0 | 8.49 | 0 | -1388.51 |
| 927 | | | 2 | 0 | 31.96 | 0 | 8.49 | 0 | -1447.071 |
| 928 | | | 3 | 0 | 29.986 | 0 | 8.49 | 0 | -1502.126 |
| 929 | | | 4 | 0 | 28.013 | 0 | 8.49 | 0 | -1553.674 |
| 930 | | | 5 | 0 | 26.04 | 0 | 8.49 | 0 | -1601.714 |
| 931 | 3 | M187 | 1 | 0 | 26.04 | 0 | -8.166 | 0 | -1601.716 |
| 932 | | | 2 | 0 | 24.067 | 0 | -8.166 | 0 | -1646.249 |
| 933 | | | 3 | 0 | 22.094 | 0 | -8.166 | 0 | -1687.276 |
| 934 | | | 4 | 0 | 20.121 | 0 | -8.166 | 0 | -1724.795 |
| 935 | | | 5 | 0 | 18.148 | 0 | -8.166 | 0 | -1758.807 |
| 936 | 3 | M188 | 1 | 0 | 20.4 | 0 | 9.849 | 0 | -1761.034 |
| 937 | | | 2 | 0 | 18.427 | 0 | 9.849 | 0 | -1795.542 |
| 938 | | | 3 | 0 | 16.454 | 0 | 9.849 | 0 | -1826.543 |
| 939 | | | 4 | 0 | 14.481 | 0 | 9.849 | 0 | -1854.037 |
| 940 | | | 5 | 0 | 12.508 | 0 | 9.849 | 0 | -1878.024 |
| 941 | 3 | M189 | 1 | 0 | 12.508 | 0 | -9.681 | 0 | -1878.025 |
| 942 | | | 2 | 0 | 10.535 | 0 | -9.681 | 0 | -1898.505 |
| 943 | | | 3 | 0 | 8.562 | 0 | -9.681 | 0 | -1915.478 |
| 944 | | | 4 | 0 | 6.589 | 0 | -9.681 | 0 | -1928.944 |
| 945 | | | 5 | 0 | 4.616 | 0 | -9.681 | 0 | -1938.902 |
| 946 | 3 | M190 | 1 | 0 | 7.446 | 0 | 10.211 | 0 | -1939.634 |
| 947 | | | 2 | 0 | 5.472 | 0 | 10.211 | 0 | -1951.115 |
| 948 | | | 3 | 0 | 3.499 | 0 | 10.211 | 0 | -1959.088 |
| 949 | | | 4 | 0 | 1.526 | 0 | 10.211 | 0 | -1963.555 |
| 950 | | | 5 | 0 | -.447 | 0 | 10.211 | 0 | -1964.515 |

## Member Section Forces (By Combination) (Continued)

| | LC | Member Label | Sec | Axial[k] | y Shea... | z Shear[k] | Torque[k-ft] | y-y Moment... | z-z Moment[k-ft] |
|---|---|---|---|---|---|---|---|---|---|
| 951 | 3 | M191 | 1 | 0 | -.447 | 0 | -10.217 | 0 | -1964.515 |
| 952 | | | 2 | 0 | -2.42 | 0 | -10.217 | 0 | -1961.967 |
| 953 | | | 3 | 0 | -4.393 | 0 | -10.217 | 0 | -1955.913 |
| 954 | | | 4 | 0 | -6.366 | 0 | -10.217 | 0 | -1946.351 |
| 955 | | | 5 | 0 | -8.339 | 0 | -10.217 | 0 | -1933.283 |
| 956 | 3 | M192 | 1 | 0 | -5.532 | 0 | 9.607 | 0 | -1932.442 |
| 957 | | | 2 | 0 | -7.506 | 0 | 9.607 | 0 | -1920.854 |
| 958 | | | 3 | 0 | -9.479 | 0 | 9.607 | 0 | -1905.759 |
| 959 | | | 4 | 0 | -11.452 | 0 | 9.607 | 0 | -1887.158 |
| 960 | | | 5 | 0 | -13.425 | 0 | 9.607 | 0 | -1865.049 |
| 961 | 3 | M193 | 1 | 0 | -13.425 | 0 | -9.787 | 0 | -1865.048 |
| 962 | | | 2 | 0 | -15.398 | 0 | -9.787 | 0 | -1839.432 |
| 963 | | | 3 | 0 | -17.371 | 0 | -9.787 | 0 | -1810.309 |
| 964 | | | 4 | 0 | -19.344 | 0 | -9.787 | 0 | -1777.679 |
| 965 | | | 5 | 0 | -21.317 | 0 | -9.787 | 0 | -1741.542 |
| 966 | 3 | M194 | 1 | 0 | -19.124 | 0 | 8.023 | 0 | -1739.217 |
| 967 | | | 2 | 0 | -21.097 | 0 | 8.023 | 0 | -1703.47 |
| 968 | | | 3 | 0 | -23.07 | 0 | 8.023 | 0 | -1664.217 |
| 969 | | | 4 | 0 | -25.043 | 0 | 8.023 | 0 | -1621.456 |
| 970 | | | 5 | 0 | -27.016 | 0 | 8.023 | 0 | -1575.188 |
| 971 | 3 | M195 | 1 | 0 | -27.016 | 0 | -8.357 | 0 | -1575.187 |
| 972 | | | 2 | 0 | -28.989 | 0 | -8.357 | 0 | -1525.412 |
| 973 | | | 3 | 0 | -30.962 | 0 | -8.357 | 0 | -1472.13 |
| 974 | | | 4 | 0 | -32.935 | 0 | -8.357 | 0 | -1415.341 |
| 975 | | | 5 | 0 | -34.908 | 0 | -8.357 | 0 | -1355.045 |
| 976 | 3 | M196 | 1 | 0 | -33.667 | 0 | 5.409 | 0 | -1351.478 |
| 977 | | | 2 | 0 | -35.64 | 0 | 5.409 | 0 | -1289.882 |
| 978 | | | 3 | 0 | -37.613 | 0 | 5.409 | 0 | -1224.778 |
| 979 | | | 4 | 0 | -39.586 | 0 | 5.409 | 0 | -1156.168 |
| 980 | | | 5 | 0 | -41.559 | 0 | 5.409 | 0 | -1084.05 |
| 981 | 3 | M197 | 1 | 0 | -41.559 | 0 | -5.864 | 0 | -1084.048 |
| 982 | | | 2 | 0 | -43.532 | 0 | -5.864 | 0 | -1008.424 |
| 983 | | | 3 | 0 | -45.505 | 0 | -5.864 | 0 | -929.292 |
| 984 | | | 4 | 0 | -47.478 | 0 | -5.864 | 0 | -846.654 |
| 985 | | | 5 | 0 | -49.451 | 0 | -5.864 | 0 | -760.508 |
| 986 | 3 | M198 | 1 | 0 | -49.401 | 0 | 1.581 | 0 | -756.078 |
| 987 | | | 2 | 0 | -50.841 | 0 | 1.581 | 0 | -691.055 |
| 988 | | | 3 | 0 | -52.281 | 0 | 1.581 | 0 | -624.163 |
| 989 | | | 4 | 0 | -53.721 | 0 | 1.581 | 0 | -555.403 |
| 990 | | | 5 | 0 | -55.161 | 0 | 1.581 | 0 | -484.775 |
| 991 | 3 | M199 | 1 | 0 | -55.161 | 0 | -2.098 | 0 | -484.773 |
| 992 | | | 2 | 0 | -56.601 | 0 | -2.098 | 0 | -412.277 |
| 993 | | | 3 | 0 | -58.041 | 0 | -2.098 | 0 | -337.913 |
| 994 | | | 4 | 0 | -59.481 | 0 | -2.098 | 0 | -261.68 |
| 995 | | | 5 | 0 | -60.921 | 0 | -2.098 | 0 | -183.579 |
| 996 | 3 | M200 | 1 | 0 | -61.358 | 0 | 0 | 0 | -178.903 |
| 997 | | | 2 | 0 | -62.146 | 0 | 0 | 0 | -135.018 |
| 998 | | | 3 | 0 | -62.935 | 0 | 0 | 0 | -90.573 |
| 999 | | | 4 | 0 | -63.724 | 0 | 0 | 0 | -45.567 |
| 1000 | | | 5 | 0 | -64.513 | 0 | 0 | 0 | 0 |